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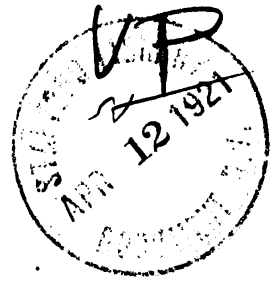
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THIRD ANNUAL REPORT

OF THE

BOARD OF RAILROAD COMMISSIONERS

FOR THE

STATE OF NEW JERSEY

FOR THE YEAR

1909

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**Members of the Board of Railroad Commissioners
for the State of New Jersey.**

FRANK H. SOMMER, *President,*
THOMAS J. HILLERY,
ROBERT WILLIAMS.

ALFRED N. BARBER, *Secretary.*

INSPECTORS.

CHARLES D. McKELVEY,
JAMES MAYBURY, JR.,
CHARLES A. MEAD, *Engineer of Bridges,*
WILLIAM C. ENNIS, *Inspector of Equipment.*

REPORT.

Honorable J. Franklin Fort, Governor of the State of New Jersey:

The State Board of Railroad Commissioners respectfully submits herewith its third annual report:

During the greater part of this year the Board has been able to proceed in the performance of its duties under a law materially better than that enacted in nineteen hundred and seven, which provided for the creation of a Board of Railroad Commissioners. This law was generally admitted to be defective and, as stated by former Attorney-General McCarter, in an official communication defining the powers of the Board, "left much to be desired in the way of supplement or amendment." Recommendations for changes in the law were made by the Board in its official report for the year nineteen hundred and seven, but the Legislature did not see fit to incorporate any of the Board's suggested changes into law.

The Legislature of nineteen hundred and nine, however, amended the original act and also passed a supplement to the act creating the Board, which amendment and supplement were approved upon April nineteenth and twentieth. The amendment provides for a more direct method of imposing a penalty for failure to comply with orders of the Board, strengthens the Board's power with respect to the issuance of subpoenas and the examination of witnesses, and also places a reasonable restriction upon a railroad company's right to appeal from orders of the Board, making it mandatory upon the company to file its appeal within thirty days. It is also provided that the appeal shall not act as a stay in complying with the order of the Board unless such stay is expressly granted by the court.

The practice of the Board has not materially changed during the year, as it has been found, as heretofore, that most of the

matters which arise are settled through negotiations with the railroad companies or by willingness on the part of the companies to comply with the Board's recommendations before the case reaches a point where a formal order may be called for.

The supplement to the act creating the Board contains some provisions which were not in the original act and which have placed additional duties and responsibilities upon the Board.

This supplement provides that no railroad company shall abandon any railroad station, or cease to maintain the usual facilities of such station, without giving thirty days' notice to the Board of Railroad Commissioners, and the Board may, after a hearing, prevent the proposed abandonment of the station. The Board is also given power, upon complaint lodged with it, by the board of chosen freeholders of any county, the governing body of any municipality, or by twenty or more freeholders and taxpayers of any township or municipality that the crossing of a railroad and highway at grade is particularly dangerous, to order, after a hearing, such crossing protected. It is further provided that no municipality shall construct or cause to be constructed any new street or highway across the tracks of any railroad company at grade, nor shall any railroad company lay tracks across any street or highway so as to make a new crossing at grade, without obtaining therefor permission from the Board.

GRADE CROSSINGS.

Suits begun by the Attorney-General in compliance with a request of the Board, for the elimination of crossings deemed particularly dangerous at Main street, East Orange; Irving street, Rahway; Market street, Paterson, and Schiller street, Elizabeth, are now in the Court of Chancery with issue joined and ready for argument.

The widespread interest in the matter of grade crossings and the laws regulating them has prompted the Board to prepare a special memorandum upon this subject, which is submitted herewith. (See Appendix.)

The Board, under existing law, has no power to order directly the removal of a dangerous crossing at grade, but, as noted above,

it does have power under certain conditions to issue orders for the protection of dangerous crossings. In a number of instances the Board has been called upon to investigate complaints alleging the existence of unusually dangerous conditions at grade crossings cited and asking that protection be afforded. Where, after such investigation, conditions in the opinion of the Board justified a requirement of additional protection, such protection has been ordered and all such orders have been complied with.

Investigation showed that at some of the crossings complained of the views were good, travel comparatively light and that ordinary precaution should eliminate the risk of accident. In such cases the Board has dismissed the complaints. Synopsis of all these petitions and the findings of the Board pertaining thereto are submitted under the heading "Complaints."

All of the dangerous crossings for which protection has been provided during the year have not been the subjects of complaint to the Board. It is the practice of the Board to investigate every accident occurring at a grade crossing, and where conditions at such crossings indicated the need of greater protection for the public safety, recommendations for such protection have been made. It will be understood that the Board's power to order a crossing protected can only be exercised following a complaint made in compliance with the requirements of the law, and that the Board has no power, upon its own initiative, to compel the protection of a dangerous crossing. It is, therefore, to the credit of the railroad companies that where the Board has pointed out, after investigation, particularly dangerous conditions and recommended that measures be taken to remove these conditions and render the crossings safer, its recommendations have been, in general, adopted. The measure of protection provided at these crossings ranges from the removal of obstructions to views to stationing of flagmen or the construction of gates.

Crossings with respect to which recommendations for protection have been made and complied with during the year, the nature of the recommendations, and the measure of protection provided are as follows:

Devon street, Arlington, on the Erie Railroad, where the crossing had been protected during the day only, the railroad company

adopted the recommendation of the Board to operate gates both day and night.

At Harrison street, Passaic, on the Erie Railroad, gates have been installed.

At the crossing of the Mount Laurel road at Masonville on the Pennsylvania Railroad, one grade crossing has been eliminated through the consolidation of two highways.

At Pitman avenue, Penn's Grove, the speed of trains passing over the crossing has been reduced to five miles per hour.

At South Woodbury, on the West Jersey and Seashore Railroad, a flagman has been placed at the crossing.

At Lawn Side, on the Atlantic City Railroad, warning bell has been installed.

On the Williamstown road, Iona, West Jersey and Seashore Railroad, warning bells have been installed.

At Holly avenue, Pitman, on the West Jersey and Seashore Railroad, gates have been installed.

At Hawthorne, on the New York, Susquehanna and Western Railroad, the crossing was previously protected by a flagman from 7 A. M. to 7 P. M. The crossing is now protected from 6 A. M. to 12 o'clock midnight.

At Lenola, on the Pennsylvania Railroad, a light has been placed on the crossing as a night warning and a signal bell has been installed.

At Park avenue, Merchantville, on the Pennsylvania Railroad, the hours of duty of the watchman have been extended to cover all trains and a warning bell placed at the crossing.

At the crossing at the station at Lumberton, on the Pennsylvania Railroad, the view was obstructed by steam escaping from a pipe at a nearby factory. This was taken up with the owners of the factory who changed the pipe so as to clear the view of the crossing.

At Garwood, on the Central Railroad, the station has been moved and further improvements recommended by the Board are under way.

At Fourteenth street, Roseville, on the Delaware, Lackawanna and Western Railroad, a bell has been placed in the gateman's



Grade crossings with views badly obstructed. Gates were placed at these crossings, in compliance with recommendations of the Board, following investigations of accidents which occurred there.

shanty so as to provide additional warning of the approach of trains.

At Landis avenue, Vineland, on the West Jersey and Seashore Railroad (electric line), where the view had been badly obstructed by cars near the crossing, the railroad company issued orders to keep the same back sufficiently far to prevent this obstruction.

At Rochelle Park, on the New York, Susquehanna and Western Railroad, where cars left on switch at the road crossing obstructed the view, the railroad company issued orders that no cars be allowed to stand in this location.

At Neshanic, on the Central Railroad, where the view was at times obstructed by cars, left for loading on siding next to main track, the company issued an order that no cars be left standing nearer the crossing than one hundred and fifty feet, and located a sign at the point to that effect.

At the Turnpike crossing on the Chimney Rock Branch of the Central Railroad, orders were issued by the company that trains or engines going north shall come to a full stop before reaching the crossing.

At Ferry avenue, Camden, on the West Jersey and Seashore Railroad, brush, which obstructed the view, was cut down and orders issued by the company that cars should not be allowed to stand on siding close enough to crossing to interfere with a fair view.

At the County Road Crossing, Mays Landing, West Jersey and Seashore Railroad, brush was trimmed on both sides of the track, in order to improve the view.

At the Asbury Park road, on the Central Railroad, between Shark river and Farmingdale, brush, obstructing the view, has been cleared away.

At Monmouth avenue, Sprink Lake, on the New York and Long Branch Railroad, trees have been cut down to provide a better view of southbound track.

At Hand avenue, Cape May Court House, on the West Jersey and Seashore Railroad, cars located on spur track obstructed the view. This matter was taken up with the company with the result that the spur was taken up and located at a point back of the station so that the obstruction no longer exists.

ACCOUNTING.

Section four of the supplement to the act creating the Board of Railroad Commissioners provides that the Board "may, in its discretion, require a uniform system of rendering accounts to the Board by the railroad companies, and order reports made in accordance with such system; *provided*, that such uniform system and all forms of accounts which may be required by the Board shall conform to the system and forms prescribed by the Interstate Commerce Commission."

The Board has ordered accounts, for the last fiscal year, to be rendered to it in accordance with the above section, submitting to the railroad companies, for this purpose, forms provided by the Interstate Commerce Commission. These forms have been used by the railroad companies in making their reports and returned to the Board and are now part of the records of the Board.

NEW CONSTRUCTION WORK.

The past year has been marked by important work in railroad construction and improvements have been made involving the expenditure of large sums of money and presenting novel features which have aroused general interest not only in New Jersey but throughout the country.

Notable in this connection is the completion by the Delaware, Lackawanna and Western Railroad of its new Bergen Hill tunnel; work upon the new line of this company from Lake Hopatcong to Slatford, near the Delaware Water gap; the opening for traffic of the tunnels of the Hudson and Manhattan Railroad system; the building by the Erie Railroad Company of an open cut through Bergen Hill, which is now nearing completion, and the elimination of a highly dangerous crossing of the tracks of the Delaware, Lackawanna and Western Railroad Company and tracks of the New York, Susquehanna and Western Railroad Company, near the Bergen tunnel.

It is considered that a brief description of important features of the above-mentioned work may be properly included in this report and the same is submitted.

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In addition to this work, which is of the first magnitude in importance, a vast amount of other work has been done and included in this is a very considerable amount of construction and repair work done in compliance with recommendations of the Board.

INSPECTIONS.

Reports of the Board's inspectors are submitted in condensed form herewith. A great part of their time has been spent in traveling over the railroad properties and checking up work called for by recommendations based on former inspections. Some of these recommendations were of a general nature applying to all railroads where like conditions existed. Such, for example, as the recommendation for the protection of drawbridges, the proposed plan for which was outlined in the last annual report of the Board. It is the belief of the Board that in a number of instances drawbridges have been made safer for travel because of additional protection provided by the railroad companies in compliance with these recommendations. It is not intended by this statement to convey the impression that the railroad companies have been indifferent to the importance of providing adequate protection for drawbridges, but it is believed that there has been a benefit when the work of the railroad companies' experts has been supplemented by the investigations of experts in the employ of the Board. This is particularly true with respect to some of the smaller roads, the revenues and financial resources of which do not admit of the employment of the engineers and experts of whose advice the larger roads may avail themselves.

A detail of the scheme of protection for drawbridges recommended by the Board is the installation of smash boards at certain draws. These boards are so placed that if the draw is open and the usual danger signal neglected, the smash board will strike the stack or cab of a locomotive, or car on an electric road, and forcibly direct attention to existing danger. The practicability of these boards as signals was questioned by some when the Board first recommended their installation, but the recommendation was nevertheless adopted. A recent inspection showed that one of these boards was broken at a much traveled draw used by an elec-

tric road and inquiry developed the fact that the night before the draw was open, and that the breaking of the smash board caused an immediate application of the brakes and averted what it seems would inevitably have been an accident attended by loss of life. The Board learned that proper disciplinary action was administered by the railroad company to the employe at fault.

In addition to the protection provided at drawbridges in accordance with the Board's recommendation a number of bridges have been improved and strengthened where inspection showed repairs to be advisable. It is generally agreed by experts in railroad operation that greater safety to traffic over long bridges is afforded when these bridges are equipped with inside guard rails and the Board recommended that such guard rails be placed on all bridges thirty feet in length and over. This recommendation has been complied with and the work completed with the exception of a few bridges where the Board has assurance that the material has been ordered and the guard rails will be placed at an early date.

ACCIDENTS.

The Board is able to record the fact that no passenger upon any railway train running in the State of New Jersey has lost his life during the year as the result of any derailment or collision.

Three accidents, all of which were collisions and all of which occurred near railway termini in Hudson county, have been deemed of sufficient importance to justify a formal hearing and public investigation by the Board.

The findings of the Board with respect to these accidents, and the recommendations submitted, will be found in another part of this report.

In addition to the above accidents formally investigated by the Board, inspectors of the Board collected information with respect to a number of accidents, many of these reports resulting in recommendations to the railroad companies. The reports and recommendations based upon the same are submitted herewith.

The result of these recommendations, made following inspections of accidents at grade crossings, has been previously referred to. Recommendations were made after a number of other acci-

dents, which recommendations have been adopted by the railroad companies and have resulted in minimizing the dangerous conditions which caused the accidents. Among these may be mentioned a number of instances where the Board's suggestions, following derailments or minor collisions, for mechanical improvements at switches have been adopted.

Many accidents reported were to employees, where investigation showed that no conditions other than the usual hazards of railroad operation existed, and the accidents were due to disobedience of the company's rules, or to carelessness on the part of the person injured. This was also true with respect to a number of accidents to passengers boarding or alighting from moving trains. It is a deplorable fact that a large number of those reported killed and injured during the year were trespassers, with no lawful right upon the railroad company's property. Reports were made to the Board of two hundred and sixty-eight such trespassers killed and injured throughout the year.

Proceedings before the Board have indicated that to render effective the power of the Board to order the protection of grade crossings, it is essential, where a street railway crosses the tracks of a steam railroad, that power should be conferred upon the Board to require the co-operation of the street railway company in the installation of protection desired.

Such proceedings likewise seem to make it wise to vest in the Board the same power of investigation and recommendation with reference to the charges of express companies employing the lines of railway, which it now possesses over the rates of the railway companies.

Numerous requests are received by the Board from the commissions of other States for copies of its findings, decisions and orders. At present the Board is not in a position to comply with these requests.

These findings, decisions and orders are the means by which the policies which the Board is working out are indicated. Their regular publication, in accordance with the policy of the commissions of other States, would serve to advise those in interest of these policies and would further relieve the Commission of

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the necessity of considering petitions and complaints touching matters upon which the Board has previously passed.

The Board therefore recommends that it be enabled to cause its findings, decisions and orders to be printed and circulated as made.

Respectfully submitted,

FRANK H. SOMMER,
THOMAS J. HILLERY,
ROBERT WILLIAMS,
Commissioners.

ALFRED N. BARBER,
Secretary.

December 31st, 1909.

Complaints.

COMPLAINT OF NUMEROUS PETITIONERS

vs.

ERIE RAILROAD COMPANY.

DISCONTINUANCE OF SALE OF TICKETS AT REDUCED RATES TO
SCHOOL CHILDREN.

Complaints were filed by several parents of children of school age and by officers of local boards of education in regard to discontinuance by the Erie Railroad Company of the sale of special commutation trip tickets to school children at reduced rates. The Board learned that this matter had been given consideration by the Public Service Commission of the State of New York, and upon inquiry was informed that the Commission of the Second District had advised the Erie Railroad Company that:

"The provision of these commutation tickets confined to the use of school children dates back so far in the past that its origin is practically unknown, and in the opinion of this Commission their continued use is extremely desirable in the public interest. In so far as transportation of school children by the Erie Railroad within this State is concerned, you are advised that your proposed discontinuance of these reduced rates is not demanded under any construction of law, by this Commission, which has sole jurisdiction of such transportation.

"Your very careful consideration of the advisability of abrogating the cancellation notice above mentioned is requested."

After a hearing in the City of Paterson, from the neighborhood of which most of the complaints were received, the following was ordered by this Board:

"It appearing that the Interstate Commerce Commission and the Public Service Commission of the State of New York have entertained contrary opinions with respect to the propriety of issuing limited school tickets, and the same question being presented to the Board of Railroad Commissioners of New Jersey:

"It is ordered, that the Secretary of this Board communicate with the Secretaries of the Public Service Commission, in the State of New York, and of the Railroad Commission, in the State of Pennsylvania, with the view of arranging for a presentation of the entire subject before the Interstate Commerce Commission at the earliest convenient date."

At a subsequent meeting the following opinion, prepared by Commissioner Whiting and assented to by Commissioners Congdon and Sommer, was filed:

"Complainants protest against the withdrawal by the Erie and the New York-Susquehanna and Western Railroad Companies of their State and interstate monthly commutation school tickets. The Railway Companies reply that they have sold such tickets for many years heretofore; that they are willing to continue to sell them at reasonable rates in the future; that they have recently filed with the Interstate Commerce Commission new interstate passenger tariffs, including special rate commutation school tickets, and that the Federal Commission has refused to receive such tariffs, on the ground that the school tickets are unlawful and discriminatory, inasmuch as they are not offered to all children of the school age. The companies urge that if they are thus forbidden to issue school tickets as to interstate travel, it would be inconsistent and discriminatory for them to issue them to school children whose journey is purely intra State.

"It seems that the same question as that before us has arisen in the State of New York, and in a ruling of the Public Service Commission for the Second District, it has been held that 'The practice of selling low-priced commutation tickets limited for use of children attending public schools or private schools having similar grades is a long standing and desirable custom or usage sanctioned by public policy and the Public Service Commission law.'

"The question is of novel impression to this Board, and at the hearing it appeared from the record before us, as above suggested, that there had been one ruling by the Federal Commission, and a contradictory ruling by the Commission of the sister State of New York, and that the carriers affected were engaged in both State and interstate commerce in each of the States of New York and New Jersey. It was further represented to this Board that there had never been a formal hearing and argument of the exact question at issue before the Federal Commission, and, accordingly, with a view to securing a thoroughgoing investigation of the question by that body, and a possible reconciliation of the apparently conflicting views of the Federal Commission and the Public Service Commission of New York, this Board invited the latter body to unite with it and the Commission of the State of Pennsylvania in the presentation of the whole question to the Federal Commission at a formal hearing. This invitation the New York Commission has respectfully declined.

"In the opinion of the Board, it is regrettable that the New York Commission feels constrained to take such a course. It may be that that body deems it to be established that whereas matters of State transportation rates are in theory of law distinct from and independent of those which are interstate, therefore, the regulation of each should be likewise distinct and independent. From such a view of the problem of railway rate regulation as presented in this country under our dual system of government, this Board dissents. It is a matter of common knowledge that eminent publicists and jurists are already proclaiming that a harmonious scheme of public regulation of railway rates as they exist in the United States is impossible without an enforced subordination of the State to the National control. Already the restraint of the State's power to interfere in the case of carriers engaged in interstate commerce is being from time to time demanded on behalf of both public and private interests. We doubt if a more clear-cut illustration of the possible inconsistencies and complications which may arise from wholly independent and conflicting rulings of State and National Commissions can be cited than that suggested by the record before us, and we express the view that such conflicts, whether for better or for worse, must inevitably tend to accelerate a movement to nationalize the control of interstate carriers. With any such movement, of course, this Board has no proper concern, save that it should endeavor to avoid, if possible, those dangers which give real occasion to attacks upon the theory of the legislation the Board is required to administer.

"Accordingly in the event of a conflict of authority arising with respect to the regulation of the rates of the carriers subject to the supervision of this Board, we announce it to be the general policy of the Commission of this State to make every reasonable effort to effect the elimination of such conflict before issuing an order or making a recommendation. If such conflict cannot in the end be eliminated, we shall in most cases be strongly impressed with the expediency of making our own rulings harmonize with those of the Federal Commission.

"As for the merits of complainants' protest, the Board is of the opinion that the question of the continued issuance of low-priced commutation school tickets is one of real importance to the people of the State of New Jersey, in both State and interstate travel. If there has been no formal hearing of the question by the Federal Commission,

we are of the opinion that one should be had forthwith, and to that end the Attorney-General, as counsel to the Board, will be requested to file the requisite petition with the Interstate Commerce Commission.

"Until the result of the hearing of such petition shall be announced, the Board will make no recommendations in the matter of the complaint before it."

A copy of this opinion was sent by the Attorney-General to the Interstate Commerce Commission at Washington, to which the Commission replied stating that it had been "asked to express its opinion upon the lawfulness of a tariff which provided for the sale and use of certain forty-six-trip monthly, so-called, school tickets. Among several regulations applying to such ticket and its use was the following:

"Monthly school tickets will be sold only to pupils who are in attendance at a public or private school, academy, or college, without regard to the age of the pupil. They are not to be sold to pupils attending dancing, swimming, riding, dressmaking (cutting or fitting), typewriting, stenographic, or similar forms of schools, nor to pupils of music teachers, art studios, or institutions of a like character, for a training in a single branch, mechanical, musical, or otherwise, nor to pupils attending business or commercial colleges, except on presentation of certificate setting forth specifically the fact that the holder is pursuing an ordinary English or academic course of study.

"This Commission did not ignore the question of public policy involved in the question of furnishing liberal opportunities as possible for children to attend school. It was called upon to pass upon the legality of the restrictions in the light of the act to regulate commerce, the foundation of which is, as you know, elimination and avoidance of undue discrimination.

"After careful consideration, the Commission announced its view as follows:

"A carrier offers a 46-trip monthly commutation ticket, and provides that it shall be issued only to pupils, without regard to age, who are in attendance on schools of a certain kind or class, and specifically provides for the exclusion of pupils attending various other kinds of schools. *Held*, that this regulation is unjustly discriminatory, and, therefore, unlawful; but that carriers may lawfully offer and use a commutation ticket limited in its sale and use to children or young persons between certain stated ages (as, for instance, from 12 to 21 years of age).

"Such arrangement will provide desired rates for school pupils, and will not exclude children traveling under substantially similar circumstances, but for the purpose of securing other lines of instruction or on other missions. It will also protect against the use of such tickets by adults. The carrier may not inquire into the mission, errand or business of the passenger as a condition of fixing the transportation rate which such passengers shall pay.

It was stated by the Interstate Commerce Commission that there had been no change in the view of any of its members; that such provision is a discrimination in favor of certain kinds of schools and against certain other kinds of schools, as well as a discrimination between the young person who is able to enjoy school privileges with parents fully able to pay expenses incident thereto and the child of poor parents or no parents who, desirous of securing some education along useful lines, attempts to learn stenography or bookkeeping or something of that sort. The

Commission expressed a willingness to give consideration to anything submitted in the matter.

Following the receipt of this the Board was advised of a hearing before the Interstate Commerce Commission upon the petition of certain schools of New York and Philadelphia, objecting to the Commission's ruling. After the hearing the Interstate Commerce Commission denied the petition and affirmed its ruling.

DAVID STRYKER ET AL.	}
<i>vs.</i>	
DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY.	

REMOVAL OF AGENT AT IRONIA.

A complaint submitted by David Stryker and Son, represented that the Delaware, Lackawanna and Western Railroad Company proposed closing its station at Ironia, Morris county, New Jersey, and it was requested that the Board require the railroad company to continue the maintenance of the station.

After hearing the Commission reported as follows:

"Complainants are residents of Morris county, in the vicinity of Ironia, a station on the Chester Railroad, which is leased to the Morris and Essex Railroad Company, and operated by the D., L. and W. Railroad Company. The defendant recently gave notice to its agent at Ironia that the station was to be closed on the 15th day of December, and, upon complaint being made to the Commission, a hearing was had at Trenton, December 8th, and testimony taken.

"From this testimony it appears that a station has been maintained at the point in question for a generation, and an agent has been kept in charge during all that time. The surrounding country is not thickly settled, and during the past eight years or more the business transacted at Ironia station has remained substantially the same. For the year ending November 30th, 1908, the cash receipts amounted to \$1,833.64, and in addition to this \$4,070.90 was collected by the railway company for freight shipped out of Ironia and paid for at the other end of the haul. The receipts for the year previous were slightly less. The expenses of the station average about five hundred dollars a year.

"At the hearing it developed that the company does not intend to abandon the station, but will continue the train service heretofore enjoyed at that point, and merely 'relieve' the agent of his duties. Complainants insist that the agent is necessary for the reasonable convenience of residents of the vicinity using Ironia station, and asked that he be continued on duty as heretofore. They urge that his services are needed for the billing of out-bound freight, the receipt and custody of in-bound freight, the checking and custody of baggage, and the sale of tickets. In connection with the subject of tickets, it appears that under the rules of the defendant company passengers may purchase excursion, commutation and other reduced fare tickets only at stations, and that the 'relief' of the Ironia agent would necessitate the purchase by Ironia passengers of single fare tickets on the train at maximum rates, plus a redeemable excess fare of ten cents.

"The company's alleged justification for its action is set forth in a letter dated November 27th, 1908, addressed to the Secretary of the Board, as follows:

"In reply to your letter of November 18th, inquiring if this company purposed closing its station at Ironia, I beg to advise that our Operating Department have decided to take this step.

"The receipts at this station are almost nothing, and the freight and passenger traffic which has been heretofore handled there can be adequately accommodated at the Horton station, which is but little over a mile distant."

"In the opinion of the Board the action of the defendant company is not warranted by the facts in the case, and the continuance of a station agent at Ironia as heretofore is required for the furnishing of proper and adequate transportation facilities for the transportation of persons and property. The receipts at Ironia are not, as the company stated, 'almost nothing.' On the contrary, the cash actually collected at the station amounts each year to about three times the costs of maintaining the station with the agent as heretofore. In addition to this, there is freight business originating at Ironia amounting to four thousand dollars per year. These figures are furnished by the company itself.

"The question at issue is not, however, to be decided from consideration of profit and loss alone. The defendant company operates a great system of railways with important branches and termini in the State of New Jersey, and its revenues and expenses at Ironia represent a minor detail in the fiscal affairs of a great quasi public enterprise. At the locus in quo it has maintained reasonably adequate station facilities for thirty years. The public has come to rely upon their continued maintenance as much as it does upon the existence of the county roads and bridges. Without showing any change in the needs of the public or the burdens of the railway company at Ironia, it is now proposed to deprive the patrons of that station of the services of the agent, and convert Ironia into a flag station. From the public point of view, this is a step backward, and constitutes, in the present case, a failure on the part of the defendant to fulfill those obligations which attach to the privilege of operating a railway. As stated by the United States Supreme Court in the case of *Atlantic Coast Line Railroad vs. The North Carolina Corporation Commission* (April 29th, 1907), 'The primal duty of a carrier is to furnish adequate facilities to the public,' and 'that duty may well be compelled, although by doing so as an incident some pecuniary loss from rendering such service may result. * * * As the duty to furnish necessary facilities is co-terminous with the powers of the corporation, the obligation to discharge that duty must be considered in connection with the nature and productiveness of the corporate business as a whole, the character of the services rendered and the public need for its performance.'

"The Public Service Commission of the State of New Jersey, Second District, has taken a substantially similar position in a recent decision in which it denied the petition of the Rutland Railroad Company to abandon Forest Station in the town of Altoona. (December, 1908.)

"An order will be entered in accordance with the views expressed in the foregoing opinion."

RESIDENTS OF POMPTON LAKE

vs.

ERIE RAILROAD COMPANY.

STATION FACILITIES AT POMPTON.

A petition was filed on behalf of numerous citizens and residents of the borough of Pompton Lakes, Passaic county, New Jersey, in which it was alleged that some four or five years prior

to the filing of the petition the station of the Greenwood Lake Branch of the Erie Railroad, at Pompton, was destroyed by fire; that since then an old car placed beside the track had been made to serve as a station; that this car is unfit for a station and it was asked that the matter be investigated by the Board.

The petitioners expressed dissatisfaction at the railroad company's reply to their complaint and requested a hearing.

After the hearing the following order was entered:

"To the petition filed with the Board in this matter an answer was interposed by the respondent company, stating that the station facilities at Pompton were adequate, 'though undoubtedly a new station would be desirable, and it is this company's intention, when financial matters permit, to provide a new station.'

"A hearing was had and witnesses both on behalf of the petitioners and the respondent heard. At such hearing it appeared that a station building had existed at Pompton for some twenty years; that this building was destroyed by fire some four years ago; that since that time the only station facilities provided have consisted of a second-class coach, which has been employed as a waiting-room, ticket and express office and baggage-room. It also appeared that the average yearly revenue at Pompton station amounted to something over five thousand dollars.

"After the consideration of the testimony, the Board finds that a proper and adequate station is not maintained at Pompton, by the Greenwood Lake Division of the Erie Railroad, and it is hereby ordered that the company erect at this point, prior to November 1st, 1909, and thereafter maintain, a proper and adequate station building."

FRANCIS W. HEENEKE ET AL.

vs.

ATLANTIC CITY RAILROAD COMPANY.

CONNECTIONS AT CAMDEN BETWEEN ATLANTIC CITY RAILROAD
TRAINS AND BOATS FOR SOUTH STREET, PHILADELPHIA.

A petition, signed by Francis W. Heeneke and others, complained that passengers upon the Atlantic City Railroad to Camden, desiring to make connections with boat for South street, Philadelphia, were required to spend from twenty-six to twenty-eight minutes, after arrival in Camden, before reaching South street, Philadelphia, a distance of less than one mile.

The Delaware River Ferry Company of New Jersey replied to this complaint, admitting that the schedule on which the boats leave Camden involves delay to passengers arriving by train No. 46, also to passengers arriving on train No. 32, but that if the schedule of trains should be advanced so as to arrive at Camden

in season to connect with boats leaving at 7:10 and 8:10 A. M., as requested by the petitioners, it would involve a delay to a large number of passengers using the same trains and destined to Chestnut Street ferry. It was further claimed that to put on another ferry boat expressly for the service would involve a very considerable expense without corresponding remuneration.

The matter was heard by the Board and an investigation made. Following this Mr. Heeneke was notified that any change in train schedules would affect passengers making connection at Camden for Chestnut street and that inasmuch as such passengers were not represented in the matter of the complaint regarding service for South street, and in view of the fact that a second boat would be put in commission on the South Street ferry in May, the Board did not deem it advisable to make a recommendation in the matter, but when a change is made again in September the Board would, if desired, take the matter up giving consideration to convenience of passengers making connection for both Chestnut street and South street, in Philadelphia.

L. C. RICHEY	}
<i>vs.</i>	
PENNSYLVANIA RAILROAD COMPANY.	

DISCONTINUANCE OF TRAIN CONNECTION AT FARMINGDALE.

Complainant recited that he has been a frequent traveler from Belmar to Lakewood, by way of Farmingdale, on the Pennsylvania Railroad train No. 299 and Central Railroad of New Jersey train No. 327; that the Pennsylvania Railroad had so changed the time of train No. 299 that the connection is eliminated; that for the past two years it had been possible to leave Belmar about 5.27 in the afternoon and reach Lakewood in the same evening shortly after six o'clock, this being during the winter months when the Lakewood resort season is in progress; that when this connection was in effect the Pennsylvania Railroad train reached Farmingdale at 5:52 P. M., and the Central Railroad train left there at 5:59 P. M.; that with the new schedule

of the Pennsylvania Railroad the train was changed so as to reach Farmingdale at six o'clock, with the result that any passengers from other points for Lakewood and points south would miss the Central train at Farmingdale by one minute.

To this the Pennsylvania Railroad Company replied stating that their investigation disclosed apparently few passengers desiring to make the connection, but that the company would be glad to make some adjustment which would satisfy the complainant; that with this purpose in view the matter had been taken up with the Central Railroad of New Jersey, which had advised that it could not arrange to hold train No. 327 for the Pennsylvania train No. 299, nor stop train No. 329, which passes Farmingdale at 6:17 P. M.; that in order to adjust the matter it would be necessary for the Pennsylvania Railroad Company to re-print all employees' and public time-tables, which could only be done at very great expense; that the change in time-tables, which gave rise to the complaint, resulted from the installation of the manual block system on the Freehold Branch, making it necessary to adjust, more or less, the time of all trains; that the elimination of the connection at Farmingdale was overlooked at the time of such adjustment, but that the company would, when the spring time-tables are put into effect, establish the connection.

This was submitted to the complainant, who advised the Board that he was not disposed to insist upon the railroad company immediately restoring the connection in question, but would look for its restoration on the first change of schedule.

J. Q. AYMAR WILLIAMSON

vs.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY.

NUMBER OF BRAKEMEN ON PASSENGER TRAINS.

Complainant charged that the Delaware, Lackawanna and Western Railroad Company had taken off from their trains a number of brakemen, leaving some of the long trains of the

company imperfectly protected and placing upon passengers the necessity of getting up and closing doors in cold weather, which if not done, in some cases, would result in doors remaining open all the way between stations.

The railroad company stated in reply that while baggagemen had been reduced to brakemen there had been no reduction in the number of brakemen employed, the number being as follows:

Trains of six cars and under, two brakemen; where baggage is carried, baggageman added.

Seven to twelve cars, two brakemen, baggageman and collector. Collector also acts as brakeman.

With the conductor this places three men on six cars and under, and five men on seven cars and over.

It was promised by the railroad company that the matter of having the doors kept closed would be taken up and this cause of complaint removed.

CITIZENS OF PEMBERTON	}
<i>vs.</i>	
PENNSYLVANIA RAILROAD COMPANY.	

CONDITION OF STATION AT SOUTH PEMBERTON.

A petition, numerously signed by citizens of Pemberton, recited that some twelve years ago the station at South Pemberton was burned down; that since then a small wooden structure had been made to serve as a station; that the same is inadequate for a proper station facility, being too small, unsanitary and unsightly in appearance; that many persons use the station in a day, often fifteen or twenty to a train, and it was asked that the Board require the railroad company to build and maintain a better station.

In reply to this complaint the Pennsylvania Railroad Company advised the Board that it would make every effort to provide the people of South Pemberton with a "suitable passenger station this season. It is one of the innumerable items of proposed expenditure that, for various reasons, have been postponed from

time to time. It will, however, be given special attention and be erected this season unless something unforeseen prevents."

This was submitted to the Board upon January 2d, and upon May 11th the mayor of Pemberton wrote to the Board stating that up to that time there had been no improvement in conditions. The matter was again taken up with the railroad company, which advised that plans had been prepared, bids obtained and that work would be commenced at once upon a new station, which would be completed within a short time.

A new station has since been built.

MICHAEL B. BOWERS ET AL.

vs.

DELAWARE, LACKAWANNA AND WESTERN
RAILROAD COMPANY.

CLOSING OF STATION AT BROADWAY, WARREN COUNTY.

Complainants recited they are shippers and receivers of freight at the Broadway station, Warren county; that the railroad company removed the station agent who had been maintained at the Broadway station ever since the Morris and Essex Railroad Company constructed an extension to Phillipsburg in eighteen hundred and eighty-six; that the railroad company has an income from the citizens of Broadway and farmers in the community amounting, as nearly as can be calculated, to between six and seven thousand dollars a year; that the removal of the station agent had removed all conveniences for shipping berries, chickens and other live stock by express, and that the railroad company refuses to deliver goods that are shipped to Broadway, but carries them on to New Village, a station without conveniences for storing merchandise.

The Delaware, Lackawanna and Western Railroad Company admitted that it had removed the station agent which had been maintained at Broadway, but denied the statements of the complainants as to income from the station, the removal of shipping conveniences and delivery of goods.

It was stated that the company maintains an agent at the Broadway station daily, except Sundays, between the hours of 9:30 and 10:35 A. M.; that the station is maintained in a safe and proper manner and that all trains stop for the purpose of receiving and discharging freight and passengers.

This complaint was heard at a meeting of the Board in Washington, New Jersey, at which meeting it was decided by the Board that the testimony taken showed the justice of the complainants' position, and an order was entered to the effect that the Delaware, Lackawanna and Western Railroad Company forthwith furnish proper and adequate transportation facilities for the transportation of persons and property at the station of Broadway, and to that end the company was directed to continue to employ an agent at said station for the convenience and assistance of passengers and shippers and receivers of freight as heretofore.

From this order an appeal was taken by the railroad company to the Supreme Court, and the matter is now awaiting final decision.

C. B. COLES AND SONS COMPANY ET AL.	}
<i>vs.</i>	
PENNSYLVANIA AND ATLANTIC CITY RAILROAD COMPANIES.	}

BELT LINE SERVICE SOUTH OF KAIGHN AVENUE, IN THE CITY OF
CAMDEN.

Complaint was filed by Bleakley and Stockwell, Esquires, on behalf of C. B. Coles and Sons Company, Eavenson and Levering, William J. Cooper and other business men and manufacturers in the city of Camden, reciting that on January 31st, 1901, the city council of the city of Camden authorized the United New Jersey Railroad and Canal Company, Pennsylvania Railroad Company, lessee, to lay a railroad track to connect with other tracks of the company and operate cars thereon on Front street over Clinton street to a point south from the south line of Kaighn avenue, in the city of Camden; that this ordinance, known as the

Belt Line Ordinance, permitted a connection to be made between the tracks of the Pennsylvania Railroad Company and those of the Atlantic City Railroad Company, and that the ordinance also provided that the Atlantic City Railroad Company should be permitted to connect tracks operated by it in the city of Camden and have the right to have their cars taken to and from industries located along Front street upon such terms as should be agreed upon between the respective companies.

It was alleged in the complaint that no connection had been made between the tracks of the railroad companies, thus defeating the intent of the ordinance, and it was claimed that because of the failure to make such a connection and permit an interchange of traffic between the two railroad systems the business and manufacturing interests of the city of Camden were injured.

The Pennsylvania Railroad Company in reply stated that it was authorized by an ordinance passed on January 31st, 1901, by the city council of the city of Camden to construct a single track railroad to connect with tracks heretofore constructed by it on private property southward in and along Front street over the north side of Clinton street to a point south of the south line of Kaighn avenue, and that the ordinance further permitted the Atlantic City Railroad Company to connect its tracks with said track, and further conferred upon the Atlantic City Railroad Company the right to have their cars taken to and from industries located on or along the said track on Front street. It was further stated that the track referred to had been constructed, and that, in conjunction with the Atlantic City Railroad Company, a contract for the interchange of cars had been entered into, as contemplated and provided for in the ordinance; it was further claimed that the company had complied entirely with the conditions of the ordinance, and it was denied that there was any discrimination against the business interests south of Kaighn avenue, as alleged by the complainants.

Reply was also received from the Atlantic City Railroad Company admitting the passage of the ordinance and directing attention to an agreement entered into between the railroad companies relative to the use of the track on Front street. It was claimed that the agreement followed strictly the lines of the ordinance,

and that under its terms the United New Jersey Railroad and Canal Company, Pennsylvania Railroad Company, lessee, agreed to move loaded and empty cars from and to any and all industries upon or along the said tracks on Front street and all sidings connected therewith. It was claimed that there was no permission granted the Atlantic City Railroad Company to use the railroad track on Front street as a connecting line over which to transport traffic to or from industries south of Kaighn avenue, Camden, to the Pennsylvania Railroad line beyond the north end of Front street. It was denied that it was the intention of the Council of the City of Camden to permit the interchange of traffic between the two railroad systems, and alleged that it was at no time suggested or proposed, when the road was built, that it should be part of the so-called belt line, but that the road was desired by the Pennsylvania Railroad interests to reach certain industries on Front street, and it was made a condition of the ordinance that the Atlantic City Railroad Company should have an equal opportunity to reach the same industries.

Copies of the replies were sent to the complainants, who were advised that the Board would, if desired, fix a date for a hearing.

Up to the time of submitting this report no hearing has been requested.

COLFAX AND STEELE	}
<i>vs.</i>	
NEW YORK, SUSQUEHANNA AND WESTERN RAILROAD COMPANY.	

RATES CHARGED ON SHIPMENTS OF CRUSHED STONE.

Eugene Emley, Esquire, submitted, on behalf of Messrs. Colfax and Steele, a complaint alleging that Messrs. Colfax and Steele are shippers of large quantities of stone from Passaic and adjoining counties over the New York, Susquehanna and Western Railroad; that in 1898 the New York, Susquehanna and Western Railroad was leased to the Erie Railroad Company, which lease was authorized by an act of the Legislature of that year, which act enumerated, as a condition of the lease, that

neither of the railroad companies should increase the then existing rate or rates of freight or passenger traffic, subject to the forfeiture of the lease.

It was charged that there had been a large increase in the rate of freight which complainants were required to pay; that in 1907 the uniform rate on the class of freight in question was thirty cents per ton, which rate prevailed prior to the lease. That since 1906 the transportation charges for the same class of freight have been at the rate of forty-five and fifty cents per ton.

This complaint was submitted to the Erie Railroad Company, which replied that the New York, Susquehanna and Western Railroad is not under lease to the Erie Railroad Company; that a majority of the capital stock of the New York, Susquehanna and Western Railroad Company is owned by the Erie Railroad Company, but that the New York, Susquehanna and Western Railroad is operated by the New York, Susquehanna and Western Railroad Company under the supervision and control of its own board of directors and officers. It was claimed that the lease referred to by the complainant is not now in effect, having expired by its own terms and not having been renewed, and that no change in the rates complained of was made during the time the lease was in force.

A copy of this answer was sent to the representative of the complainant with the request for a reply, but at the time of submitting this report nothing further has been received in the matter.

COMPLAINT OF NUMEROUS PETITIONERS	}
<i>vs.</i>	
BELVIDERE DIVISION, PENNSYLVANIA	
RAILROAD COMPANY.	

TRAIN SERVICE BETWEEN MANUNKA CHUNK AND POINTS NORTH.

Two petitions, identical in character and numerous signed by residents of Belvidere, New Jersey, Easton, Pennsylvania, and other places along the line of the Belvidere road, complained that

the management of the Belvidere Division of the Pennsylvania Railroad Company, under pretense of double tracking their road between Manunka Chunk and Phillipsburg, had discontinued passenger train No. 552 formerly arriving at Belvidere at 10:07 A. M., also Short Line train leaving Phillipsburg at 4:45 P. M. and southbound train 12:47 P. M. from Belvidere, the county seat of Warren. It was claimed that the withdrawal of these trains makes it impossible for the citizens of Warren county, or the adjacent county of Northampton, who have business west of Manunka Chunk, to leave Phillipsburg earlier than 11:15 A. M. Particular complaint was made by reason of being deprived of the privilege of having train No. 47, Delaware, Lackawanna and Western Railroad, stop on flag at Manunka Chunk, which would admit of a close connection for points west of Manunka Chunk. It was stated that the privilege had been granted by the Delaware, Lackawanna and Western Railroad Company for a few days and then discontinued for lack of proper station facilities at Manunka Chunk.

Complaint was submitted to the Pennsylvania Railroad Company, which advised upon February 5th that the improvements on the line of the Belvidere Division between Manunka Chunk and Phillipsburg having been completed, and suitable signal and telegraph service having been put in operation, the train service would be extended as far as Stroudsburg on the Delaware, Lackawanna and Western Railroad, and train service of the Lehigh and Hudson Company restored with the schedule taking effect February 8th.

This was submitted to the representative of the petitioners who, upon February 11th, wrote the Board stating that train service of the Lehigh and Hudson Railroad Company had not been restored; that the request that train No. 47 stop on flag at Manunka Chunk had not been complied with.

This was submitted to the Delaware, Lackawanna and Western Railroad Company, which advised that it could not stop train No. 47 at Manunka Chunk, but would try to arrange its schedule so as to carry passengers on trains No. 43 or No. 45, which would arrive at Delaware in time to connect with Pennsylvania train No. 568. The Lackawanna Railroad Company further advised

the Board that it had been found advisable to change passenger service on train No. 47 to No. 43, which would reach Delaware at 7 A. M., affording passengers ample opportunity to connect with Pennsylvania Railroad train; eastbound, leaving Delaware at 7:17 A. M.

This was submitted to representatives of the petitioners who suggested still further changes involving the schedule of the Pennsylvania Railroad Company and the Delaware, Lackawanna and Western Railroad Company, in order to make desired connections.

Negotiations were further conducted with the respective companies, but no agreement between them was reached. The Board, therefore, notified the petitioners that it would, if desired, order a hearing at which the points at issue would be heard. At the time of submitting this report no request for a hearing has been received.

J. E. D. NAUGHRIGHT	}
<i>vs.</i>	
CENTRAL RAILROAD COMPANY OF NEW JERSEY.	

STATION AT NAUGHRIGHT, NEW JERSEY.

J. E. D. Naughtright, of Naughtright, New Jersey, submitted a complaint reciting that when the grant of the right of way of the High Bridge Branch of the Central Railroad was secured part of the consideration therefor was a promise that the people of Naughtright should have the convenience and use of a station there. Such station was built and maintained until something like ten years ago, when the agent was removed and afterward the building was removed and replaced with a shanty which is small and neither lighted nor heated.

It was further alleged that it is impossible to ship any freight from Naughtright without first going to some other station and serving notice there of the intention and asking that a train be stopped at Naughtright to receive the freight; that no freight

can be received at Naughtright except all charges are prepaid; that freight left there is subject to vandalism because of the absence of an agent; that there are no express facilities nor telegraphic connections; that serious damage is done the community, mercantile and manufacturing concerns having gone because of the lack of station facilities.

In reply, the Central Railroad Company admitted that it has not maintained an agent at Naughtright for ten years past and further admitted that it maintains a shelter shed for the accommodation of passengers requiring transportation to and from Naughtright. It was claimed that the company's facilities for the transportation of business and services to the public in the vicinity of the station at Naughtright are entirely commensurate with the requirements of the community. It was denied that it was the duty of the company to furnish telegraphic accommodation. It was further denied that the company is in any way obligated to maintain a station at Naughtright in consideration of grants of the right of way to the so-called High Bridge Branch and claimed that, even if the defendant were obligated by contract to so maintain a station, the Board of Railroad Commissioners has not jurisdiction to consider any question of specific performance of contract. It was stated that Naughtright is afforded station facilities within two miles on either side thereof, at German Valley and Bartley, where agents are maintained, and it was further claimed that in view of the sparsely settled territory in the vicinity of Naughtright and the sporadic offerings, the passenger and freight facilities afforded at the two adjacent stations are entirely adequate in view of the circumstances and conditions.

The reply of the railroad company being unsatisfactory to the complainant the matter was heard at a meeting of the Board and the following order entered:

"To the petition filed in this matter an answer was interposed by the Central Railroad Company of New Jersey, and hearings were subsequently had, at which witnesses on behalf of the petitioner and the respondent were heard.

"It appeared that a station is maintained by the Central Railroad at Naughtright, but that for some ten years last past no agent has been in charge of this station. This station is located some two miles from a station maintained at German Valley and some two miles from a station maintained at Bartley. Agents are maintained at both of these stations.

"The freight business to and from the Naughtright station is in charge of the agent at the German Valley station.

"The main industry at Naughtright appears to be a creamery. No complaint has been received by the Board from those engaged in the conduct of this creamery of a lack of proper and adequate station facilities.

"The territory surrounding the station is sparsely settled, and the passenger and freight business at this point, as shown by the schedules submitted to the Board, is small.

"While it appears from the testimony that if an agent were maintained at the Naughtright station, the passenger and freight receipts would increase, it also appears that this increase would be produced by a diversion of business from the German Valley station.

"The Board concludes that proper and adequate station facilities are now provided at Naughtright, in view of present conditions, and the petition herein is denied.

"It has been intimated to the Board, informally, that a new industry is to be established at Naughtright. This, of course, has not been taken into consideration by the Board in reaching its conclusion. If a new industry is established at Naughtright, the petitioner herein may again apply to the Board."

SAMUEL WARBASSE

vs.

NEW YORK, SUSQUEHANNA AND WESTERN
RAILROAD, DELAWARE, LACKAWANNA
AND WESTERN RAILROAD AND SUSSEX
RAILROAD COMPANIES.

STATION AT WARBASSE.

"Complaint was made to the Board by Samuel Warbasse that the station facilities provided at the Warbasse station of the New York, Susquehanna and Western Railroad Company were inadequate.

"Issue being joined upon this complaint by answer interposed thereto, a hearing was held by the Board, at which hearing testimony produced by the complainant and by the New York, Susquehanna and Western Railroad Company was heard. A personal inspection of the station in question was also made by the Board.

"As the result of the testimony and personal inspection, the Board finds that the station of the New York, Susquehanna and Western Railroad Company at Warbasse consists of an old freight car, which is made to serve the purposes of a waiting-room for passengers, a ticket office, an express office and a freight-room. The space set apart as a waiting-room in this car is about nine feet by ten feet in dimension; in the centre of this space is a stove, which takes up much of the little room provided for waiting passengers; the ceiling of the car is low.

"The line of the New York, Susquehanna and Western Railroad Company, and that of the Sussex Railroad Company intersect at Warbasse. A station known as 'Branchville Junction' is located on the line of the Sussex Railroad Company, about one-third of a mile from the Warbasse station of the New York, Susquehanna and Western Railroad Company. Passengers on the line of the Sussex Railroad Company desiring to continue their trip upon the line of the New York, Susquehanna and Western Railroad leave the trains of the former company at 'Branchville Junction' and wait for the connecting train at Warbasse station.

"After due consideration the Board finds and adjudges that the New York, Susquehanna and Western Railroad Company does not furnish a proper and adequate station at Warbasse.

"The Board of Railroad Commissioners for the State of New Jersey, therefore, hereby, on this twenty-first day of December, one thousand nine hundred and nine,

"Orders that the said New York, Susquehanna and Western Railroad Company provide, before May first, nineteen hundred and ten, a proper and adequate station at Warbasse upon its line.

"The Board recommends that the station, when erected, be located at the junction of the Sussex Railroad and the New York, Susquehanna and Western Railroad, and it suggests that the plans for the erection of a proper and adequate station in conformity with this order be submitted by the railroad company to this Board."

CHARLES TEMPERLEY <i>vs.</i> ERIE RAILROAD COMPANY.	}
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TRAIN SERVICE ON THE GREENWOOD LAKE DIVISION.

Charles Temperley complained alleging that the first westbound train, No. 507, over the New York and Greenwood Lake Division arrives at Chestnut Hill-Glen Ridge at 7:56 A. M. and the next train that stops there is No. 511, arriving at 11:02 A. M.; that train No. 509, passing through Chestnut Hill-Glen Ridge at 9:50 A. M., is not scheduled to stop. It was asked that Chestnut Hill-Glen Ridge be made a flag station for this train. It was further alleged that there is a train, No. 527, which arrives at the station at 5:15 P. M., and that the next train that stops there is No. 585, arriving at 6:21 P. M.; that two trains, No. 525 and No. 529, pass through during the interval and that if either one stopped it would be an accommodation to a considerable number of commuters and to the general public.

The Erie Railroad Company replied to Mr. Temperley's complaint stating that Chestnut Hill-Glen Ridge will be made a flag stop for train No. 509 to receive and discharge passengers. It was claimed that trains No. 525 and No. 529 could not be stopped without detriment to the general service; that there are thirty-one trains per day stopping at Chestnut Hill, of which sixteen are eastbound and fifteen westbound trains, and it was further claimed that the service afforded should be considered adequate for the number of passengers to be accommodated. It was alleged that should train No. 529 stop at Chestnut Hill, passengers would gain but nineteen minutes as train No. 531 stops at Chestnut Hill at 6:22 P. M.

The reply of the railroad company was submitted to Mr. Temperley, who expressed appreciation at the making of Chest-

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nut Hill a flag station for westbound train No. 509. The train schedule was reviewed at length, figures submitted as to the number of commuters between New York and Chestnut Hill, and it was requested that the Erie Railroad Company be asked to reconsider their decision regarding train No. 529 and make Chestnut Hill a regular stop for the same.

Following this a date was appointed for a hearing but the railroad company, before the date arrived, agreed that train No. 529 should, upon the next change of schedule, be made a regular stop at Chestnut Hill, which was satisfactory to the complainant.

ROCKAWAY BOARD OF TRADE
vs.
DELAWARE, LACKAWANNA AND WESTERN
RAILROAD COMPANY.

TRAIN SERVICE AT ROCKAWAY.

The Rockaway Board of Trade alleged that the train service provided by the Delaware, Lackawanna and Western Railroad Company at that place was inadequate, and asked that two additional trains be stopped at the station, one, train No. 4, going east, leaving Dover 3:45 P. M., and train No. 25, going west, leaving New York at 4 P. M. and arriving at Dover at 5:24. It was alleged that there is no train from New York between 2:34 and 6:31 P. M., and none leaving Rockaway for New York between 2:53 and 6:50 P. M., a stretch of about four hours in each case, which condition, it was claimed, causes the people of the vicinity great inconvenience.

The Delaware, Lackawanna and Western Railroad Company in reply alleged that the trains No. 4 eastbound and No. 25 westbound are not operated over the Rockaway branch, but via the main line of the Boonton branch; that the trains are express trains operated primarily for the accommodation of commercial travel between Plymouth and Scranton, Pennsylvania, and New York, and that such stops as are made between those points are

made at points of importance to which there is more or less travel on these trains from the termini of that movement.

It was claimed that to stop the express train at Rockaway would involve not only an additional stop, but the further movement via the Rockaway loop, and would unjustifiably retard the movement of the trains and interfere with the service they are intended to furnish.

Following the receipt of the railroad company's reply, which was unsatisfactory to the petitioners, a hearing was held and testimony taken, upon the consideration of which the Board denied the petition.

The Board, however, recommended that train No. 462 leave Dover by way of Rockaway on the Boonton branch of the Delaware, Lackawanna and Western Railroad between 4:30 and 5:30 P. M. instead of 2:00 P. M., making all intermediate stops to Hoboken.

EIGHTH WARD CITIZENS LEAGUE, JERSEY CITY,	}
<i>vs.</i>	
CENTRAL RAILROAD COMPANY OF NEW JERSEY.	

STATION AT WEST SIDE AVENUE, JERSEY CITY, NEWARK BRANCH
OF CENTRAL RAILROAD OF NEW JERSEY.

The Eighth Ward Citizens League complained that extremely dangerous conditions exist at the West Side avenue station, Jersey City, on the Newark branch of the Central Railroad of New Jersey, in that passengers boarding and alighting from eastbound trains must pass over the westbound tracks; that many express trains pass the station at a high rate of speed during the rush hours of the day, and that many passengers from New York frequently leave the trains from the left side, stepping over the main eastbound track. It was stated that the tracks are also used at this point by a great many people as a short cut in going from West Side avenue to points south and east of the station. It was requested that the Board should require the Central Railroad Company to erect an iron fence between the main tracks,

extending several rods each way from the station, and that a tunnel should be constructed for the use of passengers to and from the eastbound trains so as to cut off the use of the tracks as a pathway by pedestrians and insure safety to passengers.

In reply the Central Railroad Company admitted that passengers boarding and alighting from eastbound trains must pass over the main westbound tracks, but claimed such mode of boarding and alighting to be proper and reasonable under the circumstances. It was denied that express trains pass the station at an unreasonable rate of speed, and was claimed that passengers alighting from trains from New York between the east and westbound tracks and not on the station side of the westbound track do so in spite of efforts on the part of the railroad company and its employes, and that the action of such passengers is improper and involves a trespass on their part. It was claimed that the station facilities at West Side avenue station are reasonable and commensurate with the requirements of the community.

The reply of the railroad company being unsatisfactory to the complainant, a day was arranged for a hearing, but before the date arrived the railroad company notified the Board that improvements would be made at the station involving an eastbound shelter shed and an intertrack fence with steps to and from West Side avenue.

In view of this, it was requested by the petitioners that the hearing be postponed.

Later the company notified the Board that contracts had been let for improvements involving an expenditure of over sixteen thousand dollars, and that the work is now well progressed and rapidly nearing completion.

BOROUGH OF WESTWOOD

vs.

ERIE RAILROAD COMPANY.

}

RAILROAD CROSSINGS AT FIRST AND WASHINGTON AVENUES.

The borough of Westwood complained that the crossings at First avenue and Washington avenue, in the borough of West-

wood, by the tracks of the Erie Railroad Company, are inadequately protected; that the avenues are the only crossings to the east and west of the borough; that the crossings are dangerous ones, and it was requested that gates should be placed at these crossings.

In reply the railroad company claimed that the views approaching the railroad from each direction, on the streets in question, are excellent; that Washington avenue is now protected by a crossing alarm bell, which rings day and night upon the approach of trains, but that no protection is afforded at First avenue as the traffic over this crossing is light. It was stated that all trains stop regularly at Westwood, except trains which pass at 7:37 A. M., eastbound, and 7 P. M., westbound.

Following the receipt of the railroad company's reply, the matter was heard at a meeting of the Board and the following order entered:

"The petition herein was filed with this Board by the Mayor and Council of the Borough of Westwood. The relief sought by the petition was the erection of gates at the crossings at First and Washington avenues at grade, of the line of the Erie Railroad. To the petition an answer was interposed by the railroad company. A hearing was subsequently had, at which witnesses on behalf of the petitioner and the respondent were heard. After due consideration of the testimony the Board concludes that the petition should be, and it is hereby, denied.

"It appears to the satisfaction of the Board that the conditions at these crossings, and each of them, are such as to make it necessary for the protection of travel over the same, and for the better security of human life and public safety, that the bell now located at the Washington avenue crossing be replaced by a standard automatic bell; that a bell of the same kind be placed at the First avenue crossing, and that these bells be maintained under such a system of inspection as will keep them continuously in working order, and the Board, therefore, orders that such bells be installed and maintained at these crossings forthwith."

WALTER E. BUSH <i>vs.</i> CENTRAL RAILROAD COMPANY OF NEW JERSEY.	}
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CONDITIONS AT JACKSON AVENUE STATION, JERSEY CITY.

Walter E. Bush submitted a complaint referring to the Jersey Central Station at Jackson avenue, Jersey City, in which it was alleged that the stairs were in bad condition; that the ground

where the platform should usually be is frequently very muddy and at times in such condition as to be almost impassable. It was further claimed that doorways are broken down and that the toilets are not in proper condition, those for men being locked most of the time.

This was submitted to the railroad company, which in reply stated that the matters complained of are comprised in the regular routine of "house-cleaning," and the Board was authorized to assure complainant that in the immediate future all doorways would be put in a state of complete repair; necessary repairs would be made to the stairs; that the toilets would be put in first-class condition. It was claimed, however, that it was necessary to keep the toilets locked to prevent acts of vandalism. In regard to the platform it was claimed that the condition is equal to, if not superior, to that of the pavement and streets traversed by passengers going to and from the station. Assurance was given by the railroad company that this item would be investigated, and if conditions warranted, a concrete platform would be substituted for the crushed stone platform in place.

The railroad company notified the Board that it had sent a copy of its reply to the complainant, asking to be advised if its proposed plans would be satisfactory. The complainant was written to by the Board and his attention called to the communication by the railroad company, but no reply was received from him.

Later the company advised the Board that in going thoroughly over the situation the conclusion had been reached that an entirely new station had best be built, and that this would be done at an expense approximating fifty thousand dollars.

NUMEROUS PETITIONERS	}
vs.	
DELAWARE, LACKAWANNA AND WEST- ERN RAILROAD COMPANY.	

TRAIN SERVICE ON THE BOONTON BRANCH.

A petition, signed by David W. Ganley, of Delaware, New Jersey, as chairman, and Arthur P. Jackson, of Passaic, New

Jersey, as secretary, was presented on behalf of representative committees of civic associations of cities and towns along the Boonton Branch of the Delaware, Lackawanna and Western Railroad, organized in convention at Paterson, New Jersey. It was represented that the municipalities along the Boonton Branch have a population of 250,000 or more; that many residents of the municipalities are compelled to use the line of the Boonton Branch of the Delaware, Lackawanna and Western Railroad for travel to and from New York City and between the various municipalities; that considerable inconvenience is caused business men and others who use the road by reason of the maintenance of an inconvenient schedule, by lack of sufficient trains throughout the day and evening, and by the apparent policy of the railroad company to restrict the use of the Boonton Branch to freight business as much as possible. It was further represented that, while the communities have steadily grown in population during the past ten years, the railroad company has added no trains to its Boonton Branch service, and was stated that every section of New Jersey, within what is known as the commutation zone of New York City, has superior transportation facilities to those furnished by the Delaware, Lackawanna and Western Railroad.

It was asked that trains be added to the company's schedule as follows: A train to arrive at New York City at 8:48 A. M.; one to arrive at New York at 7:30 P. M.; one to leave New York at twelve o'clock midnight; the present Saturday train at 1:30 P. M., to be put on daily schedule at 12:20 P. M., and a new train added between 12:20 and 4 P. M., all to be local trains stopping at all stations.

Another petition, numerously signed by residents of Lyndhurst, made a complaint of similar nature in regard to train service on the Boonton Branch and additional trains and changes in the train schedule were asked for.

In reply the railroad company alleged that the entire local service on the Boonton Branch does not yield enough revenue to pay for more than the bare cost of operating the trains now in service and, considering the proportionate expense of maintenance for superintendence and fixed charges, represents a very

unprofitable traffic. It was claimed that the present schedule of passenger trains meets the present requirements of the communities on the division. It was stated that the larger proportion of the traffic between the local communities and New York City is eastbound in the morning and westbound in the late afternoon, and that the service at these times is admittedly adequate, but that during the remainder of the day and night the number of passengers using the present trains at other than so-called rush hours in the morning and evening, is so small as to make it clear that additional service is not required.

A hearing was held and numerous witnesses examined, following which the Board concluded that, upon consideration of the testimony, proper and adequate facilities are not furnished on the Boonton Branch between Hoboken and Dover after 8:15 P. M. from Hoboken, and it was ordered that the Delaware, Lackawanna and Western Railroad Company run a passenger train over the Boonton Branch to Dover, leaving Hoboken between 11:15 P. M. and 12:15 A. M., stopping at all intermediate stations.

BOROUGH OF WOOD RIDGE

vs.

ERIE RAILROAD COMPANY.

CROSSING AT MOONACHIE AVENUE.

The borough of Wood Ridge complained that Moonachie Avenue crossing is dangerous and should be protected by gates, the complaint alleging that a person had been recently killed owing to the negligence of the railroad management in not providing proper protection.

The railroad company in reply claimed that the crossing is adequately protected and that the only accident occurring there during the past five years was entirely due to the negligence of the person killed.

The reply of the railroad company being unsatisfactory to the petitioners the complaint was heard, at which time witnesses on

behalf of the petitioner and the respondent were examined. Following the hearing the Board concluded that as the testimony showed the views to be good; that the bell protecting the crossing is maintained in good working order and that a daily system of inspection of the bell existed, the protection now afforded at the crossing is reasonably adequate and the petition was denied.

TOWNSHIP COMMITTEE, WATERFORD TOWNSHIP, .	}
CAMDEN COUNTY,	
vs.	
WEST JERSEY AND SEASHORE RAILROAD COMPANY.	}

STATION AT BERLIN.

The Township Committee of Waterford township, Camden county, complained that there is no station, shed or other covering for those who are compelled to take trains on the West Jersey and Seashore Railroad from Berlin to Philadelphia, and points north; that the people are compelled to stand without covering in all kinds of weather, to their great discomfort; that the Township Committee had endeavored to obtain relief by petition to the railroad company and personal interviews with its officials, but its efforts had been unavailing.

In reply the West Jersey and Seashore Railroad Company stated that it maintains, at Berlin, a station with a waiting room for passengers, and that considering the facilities provided on the company's lines at other points it was believed that the accommodations furnished the public at Berlin are entirely adequate for the needs of the station; it was alleged that it is not feasible to erect a shelter on the side of the railroad tracks opposite the station and waiting room since there is a driveway on this side which covers so much of the railroad company's right of way as to leave insufficient room for the location of the usual shelter.

This complaint was heard, and at the hearing officials of the railroad company expressed a willingness to co-operate with the Township Committee and the Board of Railroad Commissioners

in an effort to overcome the objections of the petitioners. With the consent of the parties in interest further consideration of the matter was temporarily postponed and the Board was advised later that a shelter shed had been built.

FRANKLIN TOWNSHIP, WARREN COUNTY,	}
<i>vs.</i>	
DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY.	

CROSSING, ROAD FROM BROADWAY TO ASBURY.

Franklin township, Warren county, through its attorney, Oscar L. Jeffery, Esquire, complained that the Delaware, Lackawanna and Western Railroad Company does not maintain gates or flagman at the railroad crossing of the public road leading from Broadway to Asbury, a short distance east of the railroad station. It was alleged that the crossing is a very dangerous one and is made more dangerous by the practice of the railroad company in shifting cars; that recently a number of persons have narrowly escaped injury; that there is a great deal of travel over the road. It was asked that the Board order gates or a flagman at the crossing.

The Delaware, Lackawanna and Western Railroad Company alleged, in reply, that the railroad tracks at the crossing are upon a tangent for more than a mile on each side of the road, that the road itself is straight on each side of the railroad tracks and that views are ample in all directions. It was claimed that under these conditions there exists no necessity for the installation of gates.

The complaint was heard at a meeting of the Board, held at Dover, New Jersey. On the day of the hearing the crossing in question was viewed by the members of the Board and briefs were subsequently filed with the Board on behalf of the petitioners and the railroad company.

The conclusion of the Board was announced as follows :

"After due consideration of the testimony and the results of the inspection of the crossing in question, the Board concludes that the petition must be dismissed, and so orders.

"In so doing, the Board calls attention to the fact that as early as May ninth, nineteen hundred and eight, it had the matter of this grade crossing before it, and that as the result of an inspection, which was then made, it was found that the view of east-bound trains, from either direction, was ample, and that while the view of westbound trains was somewhat obstructed on the south side, yet, that when within a safe distance of the crossing, if reasonable precaution were taken, a good view of the track could be had. It was then recommended, however, that the practice of leaving cars on the siding at this point, near the highway, should be discontinued, and that cars upon the siding should be kept such a distance from the highway as not to interfere with the view. In the hearing there was some testimony to indicate that this recommendation has not been at all times complied with. The recommendation is now reiterated, and if it is not complied with the petitioners are given leave to apply to the Board for an order in conformity with this recommendation."

WILLIAM C. STAINSBY
vs.
ERIE RAILROAD COMPANY. }

STATION FACILITIES, GREENWOOD LAKE GLENS.

William C. Stainsby complained that there is no station building or agent at Greenwood Lake Glens station; that there is an old freight car, which serves as a shelter, and that while neither station building nor agent is necessary in the winter, they are much needed in the summer.

A letter was submitted from the Erie Railroad Company to the complainant, stating that on account of the proximity of Sterling Forest station to Greenwood Lake Glens, the distance being one and three-tenths miles, with a good wagon road between the stations, it would not be advisable to comply with the suggestion, a careful review of the situation failing to develop that there would be sufficient business at Greenwood Lake Glens to make the establishment of an agency at that point a paying proposition.

The complainant alleged that summer residents of Greenwood Lake are compelled to drive from three and one-half to five miles to the station for express and freight, which could be obtained through an agent at the Glens when leaving or taking the train, and it was stated that Sterling Forest is still further away.

The railroad company practically repeated to the Board its communication to Mr. Stainsby, and the Board offered, if the complainant desired it, to grant a hearing.

Later the complainant wrote that the railroad company had made an arrangement "which we think will be very satisfactory, and we now have no complaint to make."

TRENTON JUNCTION IMPROVEMENT SOCIETY	}
vs.	
PHILADELPHIA AND READING RAILWAY COMPANY.	

STATION AT TRENTON JUNCTION.

Upon December 22d, 1908, following a complaint made by the Trenton Junction Improvement Society, which complaint was heard at a meeting of the Board, certain recommendations were made to the Philadelphia and Reading Railway Company. Upon May 18th of this year, the Trenton Junction Improvement Society advised the Board that a bay-window which projected out over the southern point of the station, and which had been a source of danger to passengers standing on or moving about the platform, had been removed; that the objection to accommodation train No. 570, which has stopped directly in front of the station late in the afternoon and remained there for a long time, and which practice had been the source of inconvenience and danger, no longer exists.

In its communication to the Board the Trenton Junction Improvement Society further stated "that the greatest source of danger is from the crossing leading to and from the village, passing over the main tracks directly in front of the depot. No protection whatever has been afforded to passengers at this point, and no steps, so far as we are able to see, have been taken to provide the desired protection, either by means of an underground tunnel, an overhead bridge or a watchman, as your Board suggested. We, therefore, respectfully renew our application for relief to this situation."

In reply the railroad company directed attention of the Board to the following, from a communication addressed by it to the Board upon April 14th, 1909:

"In reference to your second conclusion: (a) The management of this company respectfully takes issue with your conclusion, believing that the crossing of its main tracks in front of the station at Trenton Junction is as free from danger as any crossing at grade in front of a station can be expected to be. By reason of the peculiar conditions of the traffic, resulting from the interchange of business between the main line trains and those on the Trenton branch, the use of either a subway or an overhead bridge would be practically impossible, excepting only at very great inconvenience and delay to the traffic. The employment of a flagman, suggested, would not in the least degree protect careless or reckless passengers, and would be no more necessary at that point than at any other open station on the line between New York and Philadelphia."

"I do not see anything in the present proceedings that would cause our company to change its attitude as expressed above."

As the personnel of the Board had changed since the recommendation to which the railroad company took exception was made, the Board treated the communication from the Trenton Junction Improvement Society as an original complaint, which was heard at a regular meeting of the Board, following which it was announced that:

"The Board concludes that the respondent company has failed to furnish a proper and adequate station at Trenton Junction on its line, in that persons who now seek access or egress from the station as maintained are put in extraordinary peril by reason, among other things, of the frequency and speed of trains on its main line division at that point, the tracks of which division such persons are required to cross in using the approach to the station from the public highway provided by said company, and which approach is wholly unprotected. The Board, therefore, orders that a flagman be stationed at the approach to said station between the hours of seven A. M. and seven P. M., whose duty it shall be to warn passengers approaching and leaving the said station of the passage of engines and trains.

"In order that there be no misunderstanding of this order, the Board states that the plan proposed by the Railroad Company of abandoning the present approach to the station, and providing an approach by means of the highway immediately to the west of the station has been considered by it, and that, in the judgment of the Board, after an inspection by it of the locality, the proposed approach would involve greater risk in passing to and from the station than the approach now provided."

A flagman was stationed at the Trenton Junction depot as ordered by the Board. The railroad company filed, in the Supreme Court, a notice of appeal from the decision of the Board and made application to the Board for a rehearing of the case in order that a plan might be presented which, it was claimed, would improve the conditions at the station and relieve the company of the expense of maintaining a flagman there. Following the hearing, upon the railroad company's application and the taking of additional testimony by the Board, the following was entered:

"On December twenty-second, nineteen hundred and eight, following a complaint made by the Trenton Junction Improvement Society to the Board, the Board recommended the construction of a subway or over-crossing, or the employment of a flagman at the Trenton Junction station of the Philadelphia and Reading Railroad Company, the duty of the flagman to consist in warning passengers of the passing of trains at the station.

This recommendation was not complied with by the company, and the matter being again brought before the Board, the Board, after hearing on June twenty-ninth, nineteen hundred and nine, ordered that a flagman be stationed at the approach to the said Trenton Junction station daily, between the hours of seven A. M. and seven P. M., whose duty it should be to warn passengers approaching and leaving the said station of the passage of engines and trains. After the entry of this order the company complied therewith. Subsequently the company, though complying with the order, filed, in accordance with the statute, notice of appeal from such order to the Supreme Court of New Jersey, and later, with such appeal pending, the company made application to the Board for a rehearing, in order that it might present a plan which, it was claimed, would improve the conditions at the said station and obviate the employment of a flagman, as required by the order of the Board. Notice of this application and a copy of the proposed plan were submitted by the Board to the Trenton Junction Improvement Society, the original petitioner, and thereafter a hearing was had, at which both the said company and the said society were represented, and testimony was taken and arguments heard.

"After full consideration of the record in this proceeding and the testimony of the witnesses adduced and the arguments advanced,

"It is, on this fifth day of October, one thousand nine hundred and nine,

"Ordered, that the plan for changes at the Trenton Junction station of the Philadelphia and Reading Railroad, submitted to the Board by the said company, be and the same is hereby approved; provided, that the shelter shed shown on said plan be set flush with the north side of the platform, indicated thereon, to the end that the platform may be of a uniform width its entire length; and

"It is further ordered, that upon the completion of the work by the said company, in accordance with said plan, the order of the Board, heretofore made under date of June twenty-ninth, nineteen hundred and nine, be opened, set aside and vacated, and that the said company be relieved of the duty of maintaining a flagman at the station in conformity therewith.

"(The plan proposed by the company is in accordance with certain suggestions made by the Board at the original hearing upon this petition, and not then accepted by the company, and is not open to the objections to which the plan then proposed by the company was subject, and which were noted in the order of June twenty-ninth, nineteen hundred and nine.)"

CERTAIN FREEHOLDERS AND TAXPAYERS OF THE BOROUGH OF COLLINGSWOOD vs. WEST JERSEY AND SEASHORE RAILROAD COMPANY.	}
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CROSSINGS AT GRADE IN THE BOROUGH.

A petition, numerously signed by parties representing themselves to be freeholders and taxpayers of the borough of Collingswood, prayed "for relief from the dangerous grade crossings existing in our borough, which are maintained by the West Jersey and Seashore Railroad Company," * * * "the following are, in our opinion, the most dangerous in their order, Lees avenue, City line, Zane avenue, Browning road and Cuthbert road. The crossings are unprotected except for bells, have

no flagman or gates and are highly dangerous, especially at Lees avenue where the view is obstructed."

A communication was also received from the borough clerk of the borough of Collingswood, stating that he had been instructed, by a meeting of the mayor and council, to call attention to the condition existing at city line. Mention was also made of the crossing at the Browning road and the crossing at Cuthbert road, and it was stated that in the opinion of the governing body of the municipality the crossings should have more protection than a bell and a sign post.

The railroad company in reply to the complaint submitted the following:

"At City Line, or Ferry avenue, we intend to put up bells, which, considering the nature of this crossing and the amount of travel across the same, we believe will give adequate protection to the public.

"At Browning road there is a good view in both directions, and we do not believe that any safety devices are necessary, since we are convinced that the public will be fully protected if ordinary caution is observed.

"At Zane avenue a watchman is employed during the summer season, between June first and October thirty-first, and I understand that he is on duty at the present time at this point.

"At Lees avenue there are bells, but we intend forthwith to establish a watchman at that point, as we believe the travel there is sufficient to warrant this protection to the public.

"At Cuthbert road we intend to put bells, which we believe will be sufficient protection. Certain trees and brush have interfered with the view at this point, and they are now being cut, so as to avoid any danger at this point.

"When the above changes have been made, we believe that the safety of the traveling public will be fully protected, and we trust that the citizens of the borough of Collingswood will regard these various improvements as sufficient to satisfy their complaint."

This reply was submitted to the representative of the petitioners, who advised that they were satisfied with what the railroad company agreed to and is doing with respect to the crossings to be protected, but it was stated that in the opinion of the petitioners Zane avenue should have a flagman all the year.

It was insisted that the crossing at Browning road is dangerous and should have protection; also that the crossing at city line is a very dangerous one, and it was alleged that the bell at the city line crossing fails to work.

This was submitted to the railroad company which added nothing to its reply to the original complaint, and the Board notified the petitioners that it would, upon application, grant a hearing in the matter.

CITIZENS OF MILLSTONE
vs.
PENNSYLVANIA RAILROAD COMPANY. }

TRAIN SERVICE ON THE MILLSTONE BRANCH.

A complaint, submitted by a committee appointed at a public meeting of citizens of Millstone and East Millstone, alleged that during the last thirty-eight years the Millstone Branch, extending from a point near the city of New Brunswick to East Millstone, has been under the control of the Pennsylvania Railroad Company; that during the greater portion of that time the community in the vicinity of the Millstone Branch was accommodated daily with four outgoing and four incoming passenger trains and one freight train each way, all making connections with New York, Trenton, Philadelphia and other stations along the main line of the Pennsylvania Railroad Company; that trains were discontinued on the twenty-sixth and twenty-seventh of May, nineteen hundred and nine, so that passenger trains on the Millstone Branch leave East Millstone at 6:56 and 8:30 A. M. and that there are no other passenger trains out of the towns during the day, and no passenger train coming to the towns until 6:31 P. M. It was stated that a large number of school children living in proximity to the Millstone Branch attend schools in the city of New Brunswick and are required to use the said Millstone Branch; that children are taken to school on the train leaving East Millstone at 8:30 A. M., and until the discontinuance of trains Nos. 943 and 944, returned to their homes on train leaving New Brunswick at 4:11 P. M.; that since the discontinuance of the last mentioned train the children are compelled to remain in New Brunswick from the hour of closing of school until 6:09 P. M., arriving at East Millstone at 6:31 P. M. It was further alleged that the change in the train schedules interferes with the delivery of the mails; that it works injury to business interests of the community along the Millstone Branch; that commuters and people spending their summer vacations in the vicinity of Millstone are greatly inconvenienced by the abandonment of trains, and it was requested that the Board issue an order re-

quiring the Pennsylvania Railroad Company to furnish proper and adequate transportation facilities on the said Millstone Branch.

The Pennsylvania Railroad Company in reply stated that:

"The Pennsylvania Railroad Company, lessee of the railroad of the United New Jersey Railroad and Canal Company, with which the Millstone and New Brunswick Railroad connects, operates this latter railroad as agent for the said Millstone and New Brunswick Railroad Company, and any net earnings from such operation are under the agency agreement required to be paid over to the latter company.

"The reports for this Millstone and New Brunswick Railroad Company are not available from 1871, the year referred to by the complainants, but go back to 1879. They show a deficit in that year of \$3,000, and although the said railroad has been operated as economically as possible, the annual deficit has steadily increased from \$3,000 in 1879 until, in 1908, the net loss in operation amounted to \$16,800.

"There seems to be no way to stimulate the business or put this branch on a profitable basis, and the travel is so meagre as to render its operation unduly expensive; in addition to which fact there are operating difficulties due to the local situation, which we should be glad to present if the Commission should conclude to have a hearing on the subject."

The matter was heard at a meeting of the Board, at which meeting officials of the railroad company expressed a willingness to make an effort to relieve the condition complained about. It was therefore agreed that the complaint should be made the subject of a conference between a representative of the Board, the complainants and the railroad company.

Following this and some further correspondence with the railroad company and the petitioners the railroad company advised that upon its new train schedules it had arranged for trains from East Millstone at 7 A. M., 8:30 A. M. and 7:25 P. M., all with proper connections; and from New Brunswick 7:55 A. M., to East Millstone, in addition to the train leaving New York at 3 P. M. and 5 P. M., passing New Brunswick at 4:11 and 6:09, respectively.

TOWNSHIP COMMITTEE OF CRANFORD TOWNSHIP

vs.

BALTIMORE AND NEW YORK RAILROAD COMPANY.

BLOCKING OF CROSSINGS AT CRANFORD, NEW JERSEY.

B. C. Austin, Esquire, submitted, on behalf of the Township Committee of the township of Cranford, Union county, New Jersey, a complaint alleging that the tracks of the Baltimore and

New York Railroad Company cross both South avenue and Lincoln avenue, forming the base of a triangle, the sides of which are the two avenues; that it is the practice of the Baltimore and New York Railroad to carry on switching operations at all times of the day and night and a very common occurrence for the company to block the crossings with its trains at both South avenue and Lincoln avenue for from twenty minutes to an hour at a time. It was also stated that the Baltimore and New York Railroad Company permits its engines to accumulate and stand in its storage yards for a long period of time during which soft coal is burned; that the smoke and gas emitted from the engines make houses in the locality almost uninhabitable and constitute a serious menace to the health of the occupants.

The Baltimore and New York Railroad Company in reply stated that its trains going west are placed east of South avenue until they get the signal permitting them to pass over South avenue to tracks of the main line of the Central Railroad. It was stated that empty trains frequently consist of fifty cars, but that they seldom block South avenue, especially for the time mentioned in the complaint; that in making up eastbound trains there is a certain amount of drilling done over South avenue, but not for the period of time mentioned by complainant. It was stated that the blocking of Lincoln avenue is done by train crews of the Central Railroad Company of New Jersey and the Philadelphia and Reading Railroad Company, and this only occurs when making up westbound trains, and that the crossing is rarely blocked for the time mentioned. The railroad company stated that its employees at Cranford Junction have strict instructions not to obstruct either of the crossings unnecessarily, and claimed that when teams or pedestrians desire to cross the tracks, during the periods of drilling, they are given every reasonable opportunity to do so. The company alleged that it has no engines that are stored on tracks at Cranford Junction; that the Philadelphia and Reading Railroad Company has engines lying at that point at certain times, which doubtless emit smoke and gas, but that upon complaint being made to the Baltimore and New York Railroad Company, a short time ago, their men were at once instructed to store engines in the end of the yard, which it was thought would

relieve people from the trouble. The vice-president of the road further stated: "We regret very much if our operations at Cranford Junction cause the people living in the vicinity of Cranford any inconvenience or annoyance, but it is almost impossible to carry on traffic without some little annoyance."

This reply was submitted to the complainant, with the request that the Board be advised if a hearing was desired, but at the time of submitting this report no hearing has been requested.

BOARD OF EDUCATION, TOWNSHIP OF HOPEWELL,	}	
<i>vs.</i>		
PENNSYLVANIA RAILROAD COMPANY.	}	

CONDITION OF FENCE ALONG GROUNDS OF THE TITUSVILLE
SCHOOL.

The Board of Education of the Township of Hopewell complained that a fence adjoining the grounds of the Titusville Public School is down; that it is the company's fence and that the railroad company neglects to rebuild it. It was stated that children in attendance at the school had stolen away from their teacher at times and gotten on the track; that the railroad company had been notified by the Board of Education to rebuild the fence but had not done so.

This was submitted to the railroad company which advised the Board that it would undertake repairs to the fence, the company stating "our obligations are confined to one-half of this fence. However, as it is a small matter and of public interest we will complete the whole."

ABE STRAUSS
vs.
CENTRAL RAILROAD COMPANY OF NEW
JERSEY ET AL. }

SERVICE BETWEEN NEW YORK CITY AND POINTS ON THE NEW
YORK AND LONG BRANCH RAILROAD.

A communication from Mr. Abe Strauss, of Long Branch, addressed to Governor Fort, and referred by him to the Board of Railroad Commissioners, alleged the lack of and poor train service between New York City and points on the New York and Long Branch Railroad, claiming that on holidays particularly the conditions are inadequate, the complaint specifically citing Memorial Day as a date when late trains northbound were so crowded that men, women and children were permitted to stand on platforms and steps as there was no room inside the coaches.

As both the Central and the Pennsylvania Railroad Companies operate trains between New York and Long Branch over the tracks of the New York and Long Branch Railroad, the matter complained of by Mr. Strauss was taken up with both companies.

The Pennsylvania Railroad Company stated that on the schedule in effect at the time of Mr. Strauss' complaint there were regularly between New York and Long Branch eight trains each way on the Pennsylvania Railroad, eight each way on the Central Railroad of New Jersey, and four additional boat and rail connections, arranged during hours most convenient to the public; that "with the new schedule to take effect upon June 27th there will be a large number of additional daily trains and special trains on Saturdays and Mondays and additional boat and rail connections, so that altogether the schedule is rather more elaborate than on any railway line in this country with which we are familiar, and would seem to be in every way adequate."

The Central Railroad Company, through its vice-president and General Manager, submitted the following:

"It is difficult to get at the merits of this complaint, because the complaint itself is so vague as to which of the operating companies is involved. Your Board, familiar as it is with the economic side of this question, need not be informed that two competing lines, such as the Pennsylvania Railroad and the Central Railroad of New Jersey, covering precisely the same field, do not adopt a policy which will result in the loss of traffic to a rival. As the fare is precisely the same by both lines, it needs no argument to convince anyone that each of these railroads is furnishing to this territory the very best facilities at its command.

"I don't believe the conditions on holidays along the seashore are any different from what they are on all the railroads of this country on similar occasions. It is axiomatic that we cannot have passenger equipment lying idle three hundred and sixty days a year at considerable economic loss to ourselves (and indirectly to the public in higher fares), in order to be sure of having with mathematical certainty a seat for every passenger offering at every point on our system the five or six holidays a year. So, also, we cannot anticipate with scientific certainty the exact channels of holiday travel. The contingency arising in this case is, as you know, a very usual one on every railroad line in this country.

"I will endeavor to learn so far as I can from the insufficient data afforded me just what conditions prevailed on Memorial Day, and will do just what I always do in such cases—use my best endeavors to see that we perform our duty to the public."

This was subsequently followed by a communication which submitted the result of the investigation by the operating department of the railroad company of the conditions which prevailed on Memorial Day. The replies of the railroad companies were submitted to Mr. Strauss, who replied, stating "the matter is satisfactorily covered by the several new schedules."

W. F. B. PRATT

vs.

NEW YORK, SUSQUEHANNA AND WESTERN
RAILROAD COMPANY.

RATES OF FARE BETWEEN JERSEY CITY AND BUTLER, NEW JERSEY.

Mr. W. F. B. Pratt, of Butler, New Jersey, complained that the rate of fare from Jersey City to Pompton Lakes, thirty-five miles, is seventy-five cents one way; that the rate of fare from Jersey City to Butler, thirty-eight miles, is one dollar, making a charge of twenty-five cents for a three-mile ride. It was stated that by taking a ticket from Jersey City to Paterson and paying forty cents and one from Paterson to Butler for fifty cents the cost is ten cents less than when a ticket is purchased through direct to Butler.

In reply the railroad company stated that:

"Pompton Lakes is a local point on the N. Y., S. and W., 35 miles from Jersey City.

"Butler is a local point on the N. Y., S. and W., 39 miles from Jersey City.

"Under the present basis of making rates, the charge is $2\frac{1}{2}$ cents per mile, fractions of a mile being treated as a mile. When this figures out in odd money, sufficient is added thereto to make fares end in '0' or '5'. On this basis, rate to Pompton Lakes would be 90 cents, and to Butler \$1.00.

"Pompton Junction, just east of Butler, is 36 miles from Jersey City, via the N. Y., S. and W., and but 30 miles via Greenwood Lake Division of the Erie R. R., which makes fare via latter route 75 cents; and as Pompton Lakes is directly intermediate, Jersey City to Pompton Junction via N. Y., S. and W., fare to Pompton Lakes is held at 75 cents.

"As regards purchase of ticket from Jersey City to Paterson at 40 cents, and Paterson to Butler 50 cents, thus working a combination of locals of 90 cents against through rate of \$1.00, this is explained by reason of the fact that the D., L. and W. mileage short line between these two points is 16 miles, which makes their fare, at $2\frac{1}{2}$ cents per mile, 40 cents. N. Y., S. and W. mileage is 21 miles, but to compete with the D., L. and W., N. Y., S. and W. fare must necessarily be the same."

Copy of the railroad company's reply was submitted to Mr. Pratt with the request that the Board be advised if a hearing was desired, but at the time of submitting this report nothing further has been received by the Board.

C. L. CORBIN

vs.

PHILADELPHIA AND READING RAILWAY
COMPANY.

WIDTH OF BRIDGE AT MIDDLESEX AVENUE, METUCHEN.

C. L. Corbin, Esquire, complained that the highway bridge of the Reading Railway, over the Port Reading Railroad, Middlesex avenue, Metuchen, had been burned; that the bridge was forty feet or more in width, which was none too wide for the location, the avenue being the main thoroughfare of the State for travel between New York and Philadelphia. Complainant stated that he had reason to apprehend that the railroad company contemplated putting in a narrower bridge. The Board was asked to call upon the company to state its plan and to have the site viewed so that the importance of the travel would be appreciated and that the Board might use its authority or influence to procure the proper construction of a bridge not less than forty feet wide.

The railroad company in reply stated that the former bridge was destroyed by fire on the night of July nineteenth and twentieth; that on the twentieth Mr. Corbin wrote a letter to the railroad company in which he claimed that by contract in his deed of right of way to the Port Reading Railroad Company the bridge was to be maintained at a width of fifty feet; that the company was unable to find any such agreement with Mr. Corbin and he was so advised; that he had replied that possibly the condition as to the approach was not incorporated in the deed but in a separate agreement. The company further stated that the agreement had not been produced but that aside from Mr. Corbin's claim the management had decided that it would be advisable in rebuilding the bridge not only to reconstruct the existing bridge but to increase it to a total width of fifty feet and that instructions to that end had been issued.

FREEHOLDERS AND TAXPAYERS, TOWN OF ATCO AND VICINITY	}
<i>vs.</i>	
WEST JERSEY AND SEASHORE RAILROAD COMPANY.	

CROSSING AT GRADE, ATCO AVENUE.

A petition signed by numerous parties as freeholders and taxpayers of the town of Atco and vicinity, in Camden county, alleged that the crossing at grade at Atco avenue, which is the main thoroughfare of the town, is without necessary protection to travel; that two persons have been killed at the crossing within a few years and that narrow escapes have occurred. It was requested that the company be directed to place safety gates at the crossing, the following being stated as reasons why the crossing is considered highly hazardous.

"First—It being a double-track road with the passing of from sixty-five trains daily to one hundred and ten trains on special occasions.

"Second—The frequency of the running of the trains and the noise incident thereto, thereby deadening the sense of hearing.

"Third—A curve in the road above the station.

"Fourth—A continual occupancy of the siding directly opposite the station with freight cars, obstructing the view."

The railroad company admitted crossing at Atco avenue at grade; that it is a double-track railroad and that approximately sixty-five trains pass Atco avenue daily. The statements made by the petitioners as to the danger of the crossing and necessity for gates were denied by the railroad company. The company stated that it had made arrangements to place a watchman at the crossing between the hours of 6:25 A. M. and 7:30 P. M. The petitioners requested a hearing after receipt of the railroad company's reply and the same was granted.

At the hearing it developed that with a flagman at the crossing the complaint of the petitioners was fairly well satisfied, with the exception that cars located upon a siding near the crossing obstructed the view. The railroad company promised to give this consideration and later advised the Board that the tracks of the siding had been moved so that the north end of the same is 150 feet south of the road crossing, removing the obstruction to the view.

PATERSON BOARD OF TRADE	}
<i>vs.</i>	
DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY.	

TRAIN SERVICE AT PATERSON.

The Board of Trade of Paterson filed a complaint reciting that the city of Paterson has about 130,000 inhabitants; that a certain proportion of its citizens are compelled to use the line of the Boonton Branch of the Delaware, Lackawanna and Western Railroad for business and the usual purposes of travel. It was stated that the Delaware, Lackawanna and Western Railroad Company maintains in the passenger train service on the Boonton Branch of its road, a number of express trains running east and west that do not stop at Paterson; that persons who wish to use certain express trains running west must go to either Hoboken, New Jersey, Dover, New Jersey, Washington, New Jersey, or Scranton, Pennsylvania, on a local train and take the

express from those points; that those returning on most express trains to Paterson from points west of Dover must leave express trains at that point and take a local train to Paterson; that, by reason of inconvenience and delays, travelers from Paterson, New Jersey, who would preferably use the Boonton Branch of the Delaware, Lackawanna and Western Railroad to travel to points west of Paterson, that may be reached by other lines than the Boonton Branch and main line of the Delaware, Lackawanna and Western Railroad, are compelled to go to New York and other cities and procure transportation on other lines. It was further stated that the Delaware, Lackawanna and Western Railroad Company causes express trains to stop at far less important stations on their Boonton Branch and the main line.

The Delaware, Lackawanna and Western Railroad Company in reply to this complaint claimed that the complainants are furnished at Paterson with abundant local service by the Delaware, Lackawanna and Western Railroad and other railroad companies; that all the express trains mentioned are not desired for use for local travel between points in New Jersey; that an order requiring such trains to stop at Paterson would interfere with the company's service of express character to the greatest number of people and to the public in general; that the fact that the express trains stop at Dover and Washington has no bearing on the necessity of the complainant's request, because it is largely an operative question and Dover and Washington are junction points with other branches of the company. It was claimed that making of the order requested would result in loss of time to all persons using the express trains in question between other points, would result in loss to the company in competition with other railroad companies between important cities to which the roads run, and it was further stated that all the trains mentioned in the complaint are interstate trains.

Copy of railroad company's reply was sent to the complainant with offer to fix a date for hearing if desired, but at the time of submitting this report no hearing has been requested.

LEMBECK AND BETZ EAGLE	}
BREWING COMPANY	
VS.	
ERIE RAILROAD COMPANY.	}

RATES CHARGED ON BEER FROM JERSEY CITY TO NORTH
HACKENSACK.

Lembeck and Betz, Eagle Brewing Company, of Jersey City, complained that the Erie Railroad Company charges for shipments of beer from Jersey City to the company's station at North Hackensack, New Jersey, six cents per hundred pounds for carload lots and eight cents for less than carload on shipments of full packages of beer, and four and one-half cents per hundred pounds for carloads and seven cents per hundred pounds for less than carloads on empties returned. The complainants stated that they have a customer located in Hackensack to whom large quantities of beer have been shipped for many years; that up to a few months before submitting complaint his shipments were billed to Fairmount Avenue station of the Erie Railroad Company and were charged for at a rate of four cents per hundred pounds on carload and six cents per hundred pounds for less than carload; and on the empties returned, three cents per hundred pounds for carload and five cents per hundred pounds for less than carload; that because of the customer complaining that it was impossible for him to receive shipments promptly, which, it was stated, was caused by the congested conditions at the delivery point, it was decided to make shipments to the North Hackensack station, located less than a half mile from Fairmount avenue; that the Erie Railroad Company then billed shipments at the rates complained of and that the company's bills, as rendered, were paid under protest. It was contended by the complainants that the charge of two cents per hundred pounds for haul of less than half a mile is an injustice, especially as the railroad company cannot insure the customer a prompt placing of cars consigned to him at Fairmount avenue.

The railroad company in reply claimed that the rates charged from Jersey City to Hackensack, Essex street, Central avenue,

Anderson street and Fairmount avenue are regular class rates; that the stations are located at a distance of twelve to fourteen miles from Jersey City and that the question is entirely one of schedule rates based on mileage, the rate to the four stations in Hackensack being maintained on a parity, for the reason that the different stations are located within the city limits; that the rates break at North Hackensack, the first station beyond the city limits, the distance from Jersey City to North Hackensack being fifteen miles. It was claimed that it was both logical and fair that class rates should be increased according to distance and stated that the respondent did not understand wherein any cause for complainant should arise from the fact that the stations within the limits of Hackensack are kept on a parity while the rates are slightly advanced to the first station beyond.

The reply of the railroad company being unsatisfactory to the complainant a date was fixed for a hearing. Before this date arrived the attorney for the complainant asked that the hearing be postponed as the railroad company had requested that its engineering department be given an opportunity to investigate and remedy conditions at the Fairmount Avenue station. It was stated that an improvement at that station would insure prompt delivery of freight, which would result in the withdrawal of the complaint.

The hearing was adjourned with the privilege to the complainant to re-open the matter at a future date.

RESIDENTS OF THE BOROUGH OF HAMPTON	}
<i>vs.</i>	
CENTRAL RAILROAD COMPANY OF NEW	}
JERSEY.	

WIDENING OF UNDERCROSSING IN THE BOROUGH.

A petition, signed by the mayor and numerous residents of the borough of Hampton, New Jersey, recited that the principal street of the borough of Hampton, known as Main street, runs under the line of the Central Railroad Company, the tracks of

the company being carried by a bridge, which consists of a wall of masonry on each side of the street, with iron girders laid from wall to wall upon which the tracks meet; that the distance between the walls is sixteen feet, the length of the under crossing is seventy-six feet, and the height, from the roadbed to the iron girders is twelve feet; that there are about one thousand inhabitants in the borough, and that as the railroad runs through the center of the borough there is no public way to pass from the lower to the upper part except through this undercrossing; that the highway crossing under the tracks of the railroad is the principal thoroughfare for a distance of about twenty-five miles for passing into the valley of the Musconetcong and that the travel over said undercrossing is heavy. It was stated by the complainants that when the bridge was constructed the highway was encroached upon and it was claimed that the railroad company in continuing the bridge is guilty of maintaining a public nuisance; that the undercrossing is not wide enough for two wagons to pass under it without crowding pedestrians to the wall, which greatly endangers persons passing, as, owing to the continual passing and repassing of engines over the bridge, horses are apt to become frightened while passing under the same; that owing to the narrowness of the undercrossing, drivers of vehicles approaching along the street at right angles with said street cannot see vehicles coming down the hill and through the undercrossing; that since Main street is extensively traveled by automobiles the dangers have been increased and that the size and situation of the bridge or undercrossing make it a menace to the safety of all those who travel over it. It was requested by the petitioners that the Board of Railroad Commissioners issue an order directing the Central Railroad Company to widen and deepen the undercrossing so that it no longer encroaches upon the highway and that the highway be made safe for pedestrians and vehicles to approach and pass through it.

To this complaint the Central Railroad Company submitted a plea praying that the complaint be dismissed, alleging that the matters and things complained of are properly cognizable in the courts of common law or equity of the State of New Jersey and

that the Board of Railroad Commissioners is without authority or jurisdiction to determine the same.

The parties in interest were notified to appear at a hearing upon the plea of the railroad company.

Before the date arrived for the hearing the Board was notified that an agreement had been made between the petitioners and railroad company that the argument upon the plea of the company should be taken off the active calendar of the Commission, subject to re-instatement at any time upon two days' notice from the counsel for the borough, in the event of pending negotiations failing to work out the results desired by the borough.

THEODORE ELSH <i>vs.</i> WEST JERSEY AND SEASHORE RAILROAD COMPANY.	}
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LEAVING CARS LOADED WITH POWDER, ACID TANKS, ETC., AT
PENN'S GROVE.

Theodore Elsh, of Penn's Grove, New Jersey, complained to the Board that the Dupont Powder Mills are located about a mile and a half below the borough of Penn's Grove; that the track of the West Jersey and Seashore Railroad Company runs through the borough to the powder mills; that freight cars are brought up from the mills between ten and eleven o'clock A. M. and left standing on the track, in the center of the town, until twelve each night, when they are taken away by the midnight freight; that at times this freight includes from two to four carloads of powder, acid tanks and such other articles as are used in the manufacture of powder; that these cars lie within a very short distance of the home of the complainant; that they remain there during severe thunder storms. It was requested that the Board take action to prevent the continuance of this practice.

This complaint was submitted to the West Jersey and Seashore Railroad Company, which advised through its superintendent

that "necessary steps have been promptly taken to prevent recurrence in the future of the conditions therein complained of."

A copy of this letter was sent to the complainant with the request that he advise the Board if there should be any recurrence in the matter of which he complained.

About a month subsequent to this Mr. Elsh again wrote to the Board stating that there had been no cessation of the conditions that existed at the time of filing his complaint. The matter was taken up with the railroad company, which advised that the instructions of the division superintendent had been misunderstood and had not been carried out; that these instructions had been re-issued and that a sign would be promptly erected reading: "Cars must not stand north of this point."

Subsequent inspection shows that the instructions of the company are being obeyed.

PETITION OF RESIDENTS LIVING ALONG
THE CHESTER BRANCH
vs.
THE DELAWARE, LACKAWANNA AND
WESTERN RAILROAD COMPANY.

SCHEDULE OF TRAINS RUNNING BETWEEN CHESTER AND DOVER.

In this matter the following was ordered by the Board:

"A complaint signed by residents of Kenvil, Sucasunna, Ironia and Chester, on the Chester Branch of the Delaware, Lackawanna and Western Railroad, requesting various changes in the train schedule in force on that branch, was presented to the Board. A petition signed by residents of Chester, asking for the continuance of the existing schedule, was also presented to the Board.

"The changes of schedule sought by the petitioners are indicated by the following extracts from the complaint:

'In the morning we wish train No. 504 to leave Chester about 6:30 A. M., arriving in Dover about 7 A. M., in time to connect with train No. 370, leaving Dover at 7:04 A. M., via Boonton, for Hoboken, and also with train No. 354, leaving Dover at 7:22 A. M., via Morristown and Newark, for Hoboken.

'These connections would enable one to reach Hoboken at 8:30 A. M., via Boonton, and Newark, N. J., at 8:39 A. M., via Morristown, whereas, under the present schedule, the time of arrival at these places is 9:05 and 9:14 A. M., respectively.

'At night we would like train No. 505, for Chester, to leave Dover about 6:40 P. M., after arrival of train No. 365, from Hoboken, via Newark and Morristown, N. J., at 6:23 P. M.

'This change would permit one to leave Hoboken at 5:15 P. M., via Boonton, and Newark, N. J., at 5:01 P. M., whereas, under the present schedule, one

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must leave Hoboken at 4 P. M. and Newark, N. J., at 4:31 P. M., in order to connect with Chester branch train leaving Dover at 5:40 P. M.'

"To the complaint an answer was duly filed by the Delaware, Lackawanna and Western Railroad Company, and issue being joined between the petitioners and the Railroad Company, a hearing was held at Dover on August twenty-sixth, nineteen hundred and nine. The petitioners were represented by R. Fitzherbert, Esquire; the Delaware, Lackawanna and Western Railroad Company by M. M. Stallman, Esquire, and various residents of Ironia and Chester, who desired the maintenance of the present schedule, were represented by Mr. Walker. Testimony was produced on behalf of the petitioners, likewise on behalf of the Railroad Company and those desiring the maintenance of train schedule now in force.

"After consideration of the testimony, the Board concludes that the petition must be dismissed, and it is so ordered.

"It appears from the testimony that a schedule somewhat similar to that which is asked for by the petitioners was in force over a period of five years, and until some two years ago; that such schedule was the source of repeated complaint, and that as the result of these complaints the present schedule was inaugurated. The present schedule is objected to in the main by commuters on the branch, who complain that it brings them into the city of Newark and the city of Hoboken too early in the morning, and requires them to leave the city of Hoboken too early in the evening. The change in the schedule asked for is objected to by the residents of Chester, because it would require them to leave their places of residence before half past six in the morning in order to reach either the city of Newark or the city of Hoboken; that it would bring them home too late in the evening; that since the evening train is the mail train, it would delay the distribution of the mail, and because it would work great inconvenience to children living at Ironia and Chester and attending school at Dover.

"It appears from the testimony that the passenger receipts from the general public at Chester in the month of July, nineteen hundred and nine, amounted to four hundred and sixty-three dollars; that the receipts at Chester, from the commuters' tickets during that month, amounted to some twenty-nine dollars and seventy-five cents; that the receipts from the general public at Sucasunna during that month, amounted to one hundred and twenty-four dollars and fifty-three cents, and from commutation, some seventy-one dollars.

"The Board reaches the conclusion which it has, which calls for the maintenance of the present schedule, because Chester and Ironia have no trolley facilities to Dover, and are dependent wholly upon the railroad, whereas such facilities are available to the residents of the other towns located on this branch and because of the impossibility of meeting, in any other way, even approximately, the conflicting needs of Chester, Ironia and such other towns."

RESIDENTS OF PATERSON

vs.

ERIE RAILROAD COMPANY.

REMOVAL OF TRAIN BETWEEN NEWARK AND PATERSON.

A petition, numerously signed, was submitted to the Board, asking that 8:46 A. M. train, between Newark and Paterson, taken off some time ago be restored, it being claimed that under the present schedule there is a lack of proper transportation facilities.

To this the railroad company replied, stating, that the train had not run since 1903 when the practice of using both east and

westbound tracks through the Bergen tunnel for eastbound trains in the morning, was instituted, and so long as this arrangement is in effect it will be impossible to provide for the scheduling of this train. The railroad company further stated that its train handling facilities in the vicinity of Jersey City are greatly diminished on account of being handicapped by the operation of Bergen tunnel; that the morning eastbound passenger traffic is very dense and between the hours of 7 and 9:30 A. M., fifty-four commuter trains from diverging routes are put through the tunnel to the Jersey City station; that to handle this immense volume of traffic several years ago the scheme was inaugurated, whereby during rush hours the westbound track through the tunnel would be turned over almost exclusively for eastbound movement and that it was at that time that the train under discussion was discontinued, as it was found impossible to operate it in opposition to the congested eastbound travel; that these conditions must necessarily obtain until the completion of the open cut, when the schedule would be re-arranged to meet the requirements now prohibited for the reasons stated.

Upon a date set for a hearing no representative of the petitioners appeared. The railroad company was represented and stated that the Bergen cut would probably be completed about the middle of February and the petitioners were notified that further consideration of the matter would be postponed until after that date.

BOARD OF TRADE OF ELIZABETH <i>vs.</i> PENNSYLVANIA RAILROAD COMPANY, CENTRAL RAILROAD COMPANY, ADAMS EXPRESS COMPANY AND UNITED STATES EXPRESS COMPANY.	}
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EXPRESS RATES.

This complaint lodged with the Board last year was followed by several hearings and the matter was still before the Board at the time of the submission of its last report.

After argument by counsel for the petitioner and the respondent companies the following findings and conclusions were ordered entered:

"The Board of Trade of the City of Elizabeth filed its petition complaining of the rates exacted by the Adams Express Company and the United States Express Company for express transportation from the City of Elizabeth.

"These companies were made respondents to the petition.

"Among other things, a contract was alleged to exist between the Adams Express Company and the Pennsylvania Railroad Company for the handling and the carrying of express matter over the lines of the latter company. On this ground the Pennsylvania Railroad Company was joined as a party respondent to the petition.

"A like allegation was made as to the relations between the United States Express Company and the Central Railroad Company of New Jersey, and the latter company was therefore joined as a party respondent to the petition.

"The parties respondent filed their several answers to the petition.

"On the hearing of the issue thereby joined, all of the parties in interest, petitioner and respondents, were represented before the Board by counsel.

"Briefs, displaying exhaustive research into the legal questions involved in the controversy, were filed with the Board both by the petitioner and the respondents.

"Oral argument of counsel on the facts and the law were thereafter heard.

"The Board, considering the testimony, briefs and oral arguments, is, upon the following grounds, shortly stated, of opinion that the petition must be dismissed, and so orders.

"1. The jurisdiction of the Board is strictly statutory; it possesses the powers which the Legislature expressly conferred upon it, and no other. Its jurisdiction cannot be extended, by implication, to subjects other than those which the statute creating it defines. The act establishing the Board is so framed in its various provisions as to confer jurisdiction as to railroads and railroad companies. It cannot, without ignoring all rules of construction, be made to confer jurisdiction over independent express companies and the transportation of property by them over the lines of railroad companies.

"2. The testimony adduced related almost wholly to rates exacted by the express companies complained of for transportation from the City of Elizabeth, in this State, to the City of New York, in the State of New York. It was, therefore, directed to charges imposed on interstate traffic. The power of the State is confined to the regulation of intrastate traffic, and does not extend to the regulation of interstate commerce. The powers of the Board, a mere State agency, are necessarily likewise limited.

"3. The contracts between the express companies and the railroad companies, which were characterized by counsel of the petitioner as 'exclusive' and 'in restraint of trade,' have the sanction of the Supreme Court of the United States, which, in the 'Express Cases' (117 U. S. 23), definitely established the right of a railroad company to make an exclusive contract with a selected express company for the handling of all express business upon its lines, saying:

"The reason is obvious why special contracts in reference to this business are necessary. The transportation required is of a kind which must, if possible, be had for the most part on passenger trains. It requires not only speed, but reasonable certainty as to the quantity that will be carried at any one time. As the things carried are to be kept in the personal custody of the passenger or other employee of the express company, it is important that a certain amount of car space should be specially set apart for the business, and that this should, as far as practicable, be put in the exclusive possession of the expressman in charge. As the business to be done is "express," it implies access to the train for loading at the latest and for unloading at the earliest convenient moment. All this is entirely inconsistent with the idea of an express business on passenger trains free to all express carriers.' * * *

'All this must necessarily be a matter of bargain, and it by no means follows that because a railroad company can serve one express company in one way, it can as well serve another company in the same way and still perform its other obligations to the public in a satisfactory manner.' * * * 'So

long as the public are served to their reasonable satisfaction, it is a matter of no importance who serves them. The railroad performs its whole duty to the public at large and to each individual when it affords the public all reasonable express accommodations. If this is done, the railroad company owes no duty to the public as to the particular agencies it shall select for that purpose. The public require the carriage, but the company may choose its own appropriate means of carriage, always provided they are such as to insure reasonable promptness and security.'

"4. The statutes of this State (An act concerning railroads, revision of 1903, P. L. 1903, Chapter 257, Sec. 46) authorize the entry by a railroad company into special arrangements for the carrying of express matter, and provide: 'Any railroad company may receive from any express or transportation company, person or firm, any amount that such company, person or firm shall agree to pay for carrying express goods or other property, any limit to the rate of compensation in the charters of such railroad companies or otherwise to the contrary notwithstanding.'

"5. A reasonable rate is one that on the one hand will provide a fair return upon the value of the property employed for the public convenience, and that, on the other hand, will not exact from the public more than the service rendered is reasonably worth.

"6. The testimony before the Board does not satisfactorily show that the rates imposed and complained of are excessive, in view of the services rendered.

"7. Our statutes recognize the distinction between freight service and express service, and the cost thereof, in that section forty-six of the act concerning railroads, before referred to, provides that 'any railroad company may charge for the transportation of express matter in packages weighing less than one hundred pounds each, or the value of which exceeds one dollars per pound, or of property forwarded in passenger or special trains, or of property, the handling or transportation of which is attended with extraordinary expense or risk * * * any rate not exceeding twice the rate such company is allowed to charge for the transportation of ordinary goods by their respective charters or the law of the State.'

"8. It is obvious that the charges of local express companies transporting the property delivered to them, by means of horses and wagons merely, cannot afford a fair criterion for determining whether the charges for express service, including local collection, transportation by rail and local delivery, are reasonable or unreasonable.

"The rates exacted for the transportation of freight in the ordinary course of the business of the railroad companies can form no fair criterion for determining the reasonableness or unreasonableness of the charges for express service. Many elements enter into the charge for the latter service which do not enter into the former. Some of these elements are indicated in the quotation before made from the opinion in the 'Express Cases.'

"9. To determine whether the rates, particularly in question, are reasonable or not, would involve inquiry much broader than that which can be made on the testimony adduced before the Board on the issue joined.

"The independent express business conducted under exclusive contracts with the railroad companies is largely non-competitive. In view of this it seems to the Board that the charges and rates of such companies should be subject to the same scrutiny and supervision as are the charges of the companies whose lines they employ in their service, and the Board will, in its annual report, recommend to the Governor that legislation be enacted that will extend the recommendatory powers of the Board to the rates and charges of these companies."

RELOCATION OF STATION AT MOUNTAIN VIEW ON THE DELAWARE, LACKA- WANNA AND WESTERN RAILROAD.

The Delaware, Lackawanna and Western Railroad Company advised the Board of its intention to relocate its station at

Mountain View, in Passaic county, in accordance with plans filed with the Board.

The Township Committee was advised of the intention of the company and the committee notified the Board that it favored the proposed relocation.

A petition, numerously signed, objecting to the relocation of the station was submitted to the Board and another petition, equally numerously signed, favoring the proposed relocation, was also filed.

The matter was heard at Paterson and some thirty witnesses examined. At the close of the testimony the Board visited the territory affected by the proposed relocation, and after due consideration concluded that the proposed relocation would afford proper and adequate station and transportation facilities and the objecting petition to said relocation was dismissed.

PETITION OF THE HOBOKEN }
BOARD OF TRADE.

ELIMINATION OF GRADE CROSSING AT WILLOW AVENUE.

"The Board of Trade of Hoboken filed its petition with this Board requesting its aid in securing the elimination of a railroad grade crossing at Willow avenue.

"At the point complained of, which forms the dividing line between Hoboken and Weehawken, Willow avenue is crossed by railroad tracks employed by two railroad companies; located a short distance beyond the avenue is an important freight yard, which is reached by use of this crossing. Upon the avenue, and crossing the railroad tracks, a street railway line is operated.

"The avenue is a most important thoroughfare, affording the only practical means of approach for teams with heavy loads from the North Hudson towns to the water front.

"The crossing is now protected by gates, and is probably as well protected as it is possible for a crossing at grade to be.

"The protection, however, does not prevent the possibility of the stalling of a trolley car on the railroad tracks; nor does it tend to minimize—on the contrary, it rather tends to increase—the delay to traffic on the avenue.

"The Board of Trade and other similar bodies having failed to secure the elimination of the crossing at grade through agreement between the railroad companies and the municipalities affected, or through action by the municipalities against the railroad companies, as a last resort made this appeal.

"While the Board recognized its lack of power, under the opinion rendered by the Attorney-General of the State soon after its organization, to order the crossing at grade abolished, and so advised the petitioner, it, nevertheless, at the request of the petitioner, held a public hearing at the Chancery Chambers in Jersey City, and subsequently visited the crossing complained of. To this hearing the representatives of the various municipalities and railroad companies affected were invited. This invitation met with cordial response.

68 RAILROAD COMMISSIONERS' REPORT.

"At the hearing there was, in general, agreement upon two propositions:

"(1) That the crossing at grade should be abolished, and

"(2) That a viaduct would provide the only feasible substitute therefor.

"There was marked disagreement, however, as to the measure in which the cost of the substitution should be met.

"It was suggested:

"(a) That the entire cost should be borne by the railroad and street railway companies.

"(b) That the cost of construction of the 'bridge' proper should be borne by these companies, and the cost of the approaches by the county.

"(c) That the total cost should be apportioned between the county and the companies on the basis of a fixed percentage to be borne by each.

"It was urged that no part of the cost should be imposed directly upon the municipalities of Hoboken and Weehawken, because these municipalities were not financially able to bear such imposition, and because the abolition of the crossing would redound equally to the advantage of all the municipalities of North Hudson.

"The Board is impressed by the seriousness of the situation to which its attention is directed by the petitioner. Its lack of power to order, however, leaves one course only open to it, and in pursuance thereof it recommends:

"That the grade crossing complained of be eliminated; and to that end,

"It recommends that the municipal authorities of Hoboken and Weehawken call a joint conference of the representatives of the county, of the adjoining municipalities whose inhabitants would benefit by the proposed change, and of the railroad companies and street railway company which would be affected.

"Failing agreement as the result of such a conference, the Board will direct the Attorney-General of the State to institute an action in the Court of Chancery to secure the end desired.

"The situation developed through this application manifests once more the unsatisfactory state, at present, of the law relating to abolishing grade crossings where agreement between municipalities and railroad companies cannot be attained.

"In the absence of such agreement, the respective rights of the municipalities and the railroad companies still remain to be passed upon by our Court of Errors and Appeals, and such determination will, in view of the status of the cases now pending involving the question, be long delayed.

"For the purpose of securing information, in addition to that already obtained and published in the annual reports of the Board, which may be laid by this Board before the Governor of the State, and which may possibly indicate the way to a solution of the problem, this Board now resolves:

"(1) That the statutes and adjudications of the State relating to the elimination of grade crossings be compiled, and

"(2) That its secretary address to the chief executive of each municipality of the State in which a railroad crossing at grade exists, and to the several companies maintaining such crossings, a communication containing the following inquiries:

"(a) Should any further legislation relating to elimination of railroad grade crossings be enacted pending final determination of the questions raised in the case of *Newark v. Erie R. R. Co.*, and others?

"(b) If such legislation should be enacted, what provisions should be made therein for determining whether a given crossing should be abolished, and the means to be employed, whether the diversion of a highway, the closing of a highway, or the construction of an underground or overhead crossing?

"(c) What provision should be made for determining the order in which the various crossings should be abolished?

"(d) What provision should be made for the payment of the cost of elimination?"

PETITIONS AND REMONSTRANCES IN REGARD TO CONSTRUCTION
OF NEW CROSSINGS AT GRADE.

PHILADELPHIA AND READING }
RAILWAY COMPANY. }

ACROSS CALHOUN STREET, TRENTON.

The Philadelphia and Reading Railway Company advised the Board of its desire to increase its facilities at Trenton to give the patrons of the road a larger and better yard for the receipt and the delivery of freight, near Calhoun street.

The municipal authorities of the city of Trenton were notified of the application of the railroad company and a date was set for a hearing.

No objection was made by the municipal authorities, or by any other party, and the Board, after having viewed the property, decided to grant the permission to lay an additional track across Calhoun street, upon condition that when crossing movements are made one of the train crew should precede the train for the purpose of giving warning of its approach.

CENTRAL RAILROAD OF }
NEW JERSEY. }

ACROSS FIRST STREET, BAYONNE.

The Central Railroad Company made application for permission to lay tracks across First street, at grade, in the city of Bayonne, to make a new single-track railroad crossing at that point. The railroad company represented, in its application, that the track in question is designed to serve with industrial sidings the works of the Texas Company, which company purchased its works site in reliance upon a future railroad switching service; that it had designed its plant and accessories in reference thereto and that the site and plant would be rendered useless and unavailable if permission for the grade crossing should not be granted;

that the purchase of the site was consummated and plans for the works and the industrial siding service formulated prior to the passage of the law, requiring permission to be obtained from the Board for the construction of a new crossing at grade, and that should the Board decline to grant permission great hardship would ensue to the Texas Company, which it could in no way avoid.

It was further contended that the construction at grade is the only possible construction at the place in question, because an undergrade crossing could not be effected on account of the slight altitude above tidewater of the surface of the land and that an overgrade crossing could not be effected because the resulting grades would render impossible any switching service to and from the industries to be served. The petitioner further urged that as siding facilities had been afforded to the Standard Oil Company and the Tidewater Oil Company, business rivals of the Texas Company in Bayonne, said petitioner felt that similar siding facilities should be afforded to the Texas Company.

The petition was accompanied by an ordinance of the governing body of the city of Bayonne, granting consent to the railroad company to construct the new crossings upon certain conditions imposed therein for the protection of the crossing.

The Board decided to grant to the railroad company permission to construct the crossing, subject to the conditions set forth in the ordinance of the governing body of the city of Bayonne.

RARITAN RIVER RAILROAD }
• COMPANY.

ACROSS HIGHWAY IN SOUTH RIVER.

The Raritan River Railroad Company submitted a plan showing a proposed additional track across the highway known as the road to Old Bridge, in the borough of South River. The company represented that the additional crossing is part of a scheme for improved yard facilities at South River to meet the requirements of operation and to afford better railroad facilities in the

growing community; that it would result in reducing the frequency of crossing said highway in drilling operations and that it would also accommodate the enlargement of the plant of the American Enameled Brick and Tile Company.

The petition of the railroad company was supplemented by one from the American Enameled Brick and Tile Company, which company stated that the additional siding "is absolutely imperative to prompt installation of a large amount of additional machinery for which plans are now drawn and awaiting execution as soon as your body will grant the request of the Raritan River Railroad Company. The additional track petitioned for by the Raritan River Railroad Company will also give them additional yard facilities further down toward our work, which will also be of great advantage to our company and we are desirous of seconding their petition in the most emphatic terms and on that account have addressed you this communication."

The Board served notice upon the mayor of South River of a date fixed for hearing.

No one appearing in opposition, the Board, in order to enable the railroad company to provide the additional facilities desired, and believing that the proposed crossing would result in reducing the frequency of the use of the highway in drilling operations, granted the petition.

RARITAN RIVER RAILROAD
COMPANY. }

ACROSS FELTUS STREET, SOUTH AMBOY.

The Raritan River Railroad Company submitted a plan for proposed crossing across Feltus street, South Amboy, at grade, representing that an extension of the present switch into the works of the Citizens' Light and Fuel Company was desired.

Communication with the mayor of South Amboy disclosed the fact that permission had been previously granted by the common council to put in the switch.

It was decided by the Board to grant permission to the railroad company to construct the switch under the following conditions:

"That the said Raritan River Railroad Company, its successors and assigns, shall not permit any car or cars or locomotive or other rolling stock to remain standing on said Feltus street, and shall not permit any car or locomotive to block the crossing of said street, when running over the same, more than five minutes at a time; nor shall it permit any car or locomotive to run over the said street at greater speed than at the rate of six miles per hour, and the bell of the locomotive shall be rung or the whistle of the locomotive blown, at all times before entering upon or crossing said street."

WEST JERSEY AND SEASHORE RAILROAD
COMPANY. }

ACROSS TRACKS BETWEEN BUENA AND RICHLAND.

The West Jersey and Seashore Railroad Company filed with the Board copy of a notice of application served upon it for a new road and for the vacating of a road across the tracks of said company between Buena and Richland, upon its Newfield Branch.

The crossing over its tracks which it was desired to vacate was not in a suitable location for the development of the locality, and the company was willing that a new crossing, more desirable, for the development of the locality, should be constructed provided the present road crossing should be vacated.

Conditions at the crossings were viewed and reported upon by a representative of the Board, which report disclosed that the conditions at both crossings were identical and it was decided by the Board to grant the permission to construct the new crossing, said permission to become effective when the old crossing is vacated.

PINE BEACH IMPROVEMENT
COMPANY. }

The Pine Beach Improvement Company advised the Board that it was building a road to the river front at Pine Beach, Ocean county, to connect with a hotel which it proposes to erect and that it would be necessary to cross the main line of the Amboy Division of the Pennsylvania Railroad and permission to make such crossing was requested.

The railroad company and the township authorities were notified of the application and of the date set for hearing the same. After the hearing the following was ordered entered:

"This application is made under Section 3, Chapter 189, P. L. 1909.

"The highway proposed to be constructed is to be a public highway. While it is not to be constructed by the municipality, but by individuals, the municipality affected, upon notice by the Board, joined in the application that the permission sought be granted.

"The Board, therefore, entertains the application as either coming within the section of the statute referred to, or within the provisions of the original act creating the Board, which requires it to keep informed of the condition and operation of all railroads, including crossings, and the abolition of grade crossings, and in this connection giving it power to make recommendations to railroad companies.

"Due notice of this application was given to the Railroad Company, no appearance was entered by it, nor was any objection on its behalf interposed.

"The proposed highway is to be constructed through an undeveloped territory and laid for the purpose of connecting two parts of a tract of land lying on either side of the railway. To require the construction of an overhead or underground crossing would, in view of the nature of the territory, and the probable volume of the traffic, be an unreasonable requirement.

"The Board, therefore, grants permission to lay this highway at grade as proposed.

"The application is one possessing special and peculiar features, and the action of the Board with respect to it must not be understood as establishing a precedent, nor must it be taken as indicating, in any way, the judgment of the Board that the development of the territory may not hereafter require the protection of the crossing by a bell, flag-man or gates, or the substitution of an overhead or underground crossing for the crossing at grade."

PETITION OF THE NORTH JERSEY RAPID
TRANSIT COMPANY FOR PERMISSION
TO CROSS CERTAIN STREETS AND
AVENUES.

The North Jersey Rapid Transit Company applied for permission to cross certain streets and highways. After hearing the following was ordered by the Board:

"The North Jersey Rapid Transit Company, a corporation organized under 'An act concerning railroads,' revision of 1903 (P. L. 1903, Chap. 257), presented its petition to the Board, setting forth that it was created for the purpose of constructing a line of railroad between a point in Bergen county, opposite the city of Paterson, to the State line near the village of Suffern, in the State of New York; that it proposed to use electricity to impel its cars by means of the overhead trolley system; that the weight of its cars would approximate from fifty to sixty thousand pounds each; that it had constructed its line from Warren Point, in the county of Bergen, opposite the city of Paterson, to the boundary line between the village of Ridgewood and the borough of Hohokus; that in completing the construction of its line it would be necessary to cross the following streets and avenues, that is to say: Morlot avenue, Berdan avenue and Fairlawn road, in the township of Saddle River, and Harristown road, Ackerman and Prospect streets, in the borough of Glen Rock, and Grove street, Spring avenue, Ridgewood avenue and Harrison avenue, in the village of Ridgewood, all in the county of Bergen, at grade. The petition prayed for the permission of this Board to the construction of said line

across the said several streets and avenues at grade, in accordance with section three, of chapter 189, of the Laws of 1909.

"Notice of the application was given by the Board to the municipalities of Saddle River, Glen Rock and Ridgewood, and Thursday, the sixteenth day of December, nineteen hundred and nine, at the City Hall, in the city of Paterson, was fixed by the Board as the time and place of a hearing upon the petition. At said time and place the petitioner and, as well, each of the municipalities affected were represented before the Board. Testimony was heard.

"The representatives of the township of Saddle River and the borough of Glen Rock expressed the desire that, so far as these municipalities were concerned, the consent sought by the petition be granted. The representative of the village of Ridgewood interposed no objection to the granting of such consent, but requested that certain conditions for the protection of the several proposed grade crossings within the limits of the village of Ridgewood should be imposed.

"After hearing the testimony and arguments on behalf of the company and the village of Ridgewood, the Board personally inspected the proposed crossings within the limits of the village of Ridgewood.

"The Board concludes that the permission prayed for by the petition should be granted.

"Permission is, therefore, hereby given to the North Jersey Rapid Transit Company to lay its tracks at grade across Morlot avenue, Berdan avenue and Fairlawn road, in the township of Saddle River; and Harristown road, Ackerman and Prospect streets, in the borough of Glen Rock; and Grove street, Spring avenue, Ridgewood avenue and Harrison avenue, in the village of Ridgewood, all in the county of Bergen.

"This permission is, however, given subject to the condition that the Railroad Company operate its cars singly, and not in trains; that it cut down and remove all trees and brush within the limits of its right of way at the Grove street crossing, in the village of Ridgewood, obstructing the view of the railroad from the highway; that it locate a station, on its right of way, on the southeast corner thereof and East Ridgewood avenue, in the village of Ridgewood, and that all cars operated by it upon its line, in either direction, come to a complete stop at such station, and, further, that it cut down and remove all trees and brush within its right of way at the Harrison avenue crossing, in the village of Ridgewood, which may obstruct the view of the railroad from the highway.

"In view of the provisions of section 26 of 'An act concerning Railroads,' Revision of 1903 (P. L. 1903, Chap. 257), the Board recommends that the Railroad Company submit to the several municipalities affected, for their approval, its plans for providing 'good and sufficient passages' across its right of way where it crosses the several public streets and avenues."

DUTY OF THE COMPANY TO CONSTRUCT AND MAINTAIN PROPER PASSAGES OVER THE CROSSINGS.

"At the hearing on the above petition, held at the city of Paterson on the sixteenth day of December, 1909, the representatives of the municipalities of Saddle river and Glen Rock appeared and urged that the permission sought be granted.

"At the same time these representatives requested information as to the duty of the company to construct and maintain proper passages over highway crossings.

"In compliance with this request, the following memorandum is filed:

"Section 26 of 'An act concerning railroads,' Revision of 1903 (P. L. 1903, Chap. 257), in so far as it is applicable to the petitioning company, and the question now raised provides as follows: 'It shall be the duty of every railroad company within this State to construct and keep in repair good and sufficient * * * passages * * * across the railroad or right-of-way where any public or other road, street or avenue now or hereafter laid shall cross the same, so that public travel on the said road shall not be impeded thereby, and the said * * * passages shall be of such width and character as shall be suitable to the locality in which the same are situated.'

"Section 29 of this act provides that 'When any company shall not properly construct and maintain the * * * crossings of highways by its railroad tracks as required by law, it shall be lawful for the governing body of the township or municipality in which such crossings are located, within a reasonable time, after notice to the company, to construct or repair such * * * crossings, and the cost thereof may be collected from the company whose duty it is to make such construction or repair by action in any court of competent jurisdiction, or in lieu of such construction or repair the township or municipality may proceed by a suit in equity to compel the specific performance of the duties imposed by law upon such company with respect to the construction, maintenance

and repair of such * * * crossings, and the court shall prescribe the crossing to be constructed or the repairs to be made; and in order to enforce obedience to its decree or mandate, the court may restrain the exercise of any of the franchises of the company, or adopt such other remedies as may be in accordance with the practice of the court.'

"In *Metuchen v. Pennsylvania Railroad Co.*, 71 N. J. Eq. 404, our Court of Chancery was called upon to consider these sections, and sustained them.

"In the course of his opinion, Vice-Chancellor Pitney said, with reference to the object of the sections (416): 'The object of the Legislature was to prevent the railroad company from imposing upon the public any increased burden by reason of the railway crossing. Hence, where there is a crossing at grade, it is the duty of the railroad to keep in repair with proper planking, etc., so much of the highway as is immediately affected by the presence of its ties and rails.

"Referring to the jurisdiction of the court, he said (406): 'The standing of the municipality in this court, in cases of this sort, was thoroughly established in the case of *Inhabitants of Greenwich v. Easton and Amboy Railroad Co.*, 24 N. J. Eq. 217, affirmed on appeal in 25 N. J. Eq. 565, which has been followed in many instances.

"However, most, if not all, of these cases were instances of preventive remedy in which the court was asked to prevent the creation of an obstruction * * * upon a public highway.

"The power of the court to compel, by mandatory proceedings, the railroad corporation to do its duty in this respect rests, so far as I am aware, wholly upon the statute of 1903.'

"It was contended that the sections were unconstitutional and that the Legislature had no power to confer upon the Court of Chancery the right and power to give to a municipality compulsory remedy by way of compelling specific performance by a railroad company of its duties, as contradistinguished from its power to give it a preventive remedy.

"Disposing of this contention, the Vice-Chancellor said (409): 'With regard to this defense, I think it has already been disposed of by the Court of Errors and Appeals. In the case of *Palmyra v. Pennsylvania Railroad Co.*, 63 N. J. Eq. 607, the question was elaborately discussed by Vice-Chancellor Gray, commencing at p. 610, and his opinion upholding the power was adopted by the Court of Errors and Appeals in affirming his decree. 63 N. J. Eq. 799.

"The same doctrine was re-affirmed in the *Perth Amboy* case. *Eckert v. Perth Amboy and Woodbridge Railroad Co.*, 65 N. J. Eq. 777.

"The court was, in both cases, dealing with a proceeding under the thirty-sixth section of the revision of the General Railroad law (P. L. 1903, p. 664), which provides for compulsory proceedings to establish gates or bars across the railway. But I am unable to distinguish between the authority given by that section (36) and that given by section 29, under which these proceedings are had.'

"While the decree in this case was in part reversed by the Court of Errors and Appeals in *Mayor, etc., of Borough of Metuchen v. Pennsylvania Railroad Co.*, 69 Atl. Rep. 465, the case, as an authority for the propositions hereinbefore quoted, was strengthened, for the opinion of the court, delivered by Chief Justice Gummere, declared (466): 'Taking up for consideration first the appeal of the railroad company, it is contended by it that the Court of Chancery has no jurisdiction over the subject-matter of the litigation. The same contention was made in the Court of Chancery, and it was there considered untenable. The grounds which led the learned Vice-Chancellor to the conclusion that the matters involved in the litigation were cognizable in the Court of Chancery, are fully set out in his opinion, and we concur in the views expressed by him on this point and in his conclusions.'"

TOWNSHIP OF BELLEVILLE, IN THE } COUNTY OF ESSEX.

PROPOSED CONSTRUCTION OF NEW GRADE CROSSING.

"The township of Belleville, in the county of Essex, made formal application to the Board, under Section 3 of Chapter 189, Laws of 1909, for permission to construct Terry

street, in said township, across the tracks of the Paterson and Newark Railroad Company at grade. A copy of the petition was duly forwarded to the railroad company, and no answer having been filed, the Board, at the request of the township, fixed Friday, December 17th, at half past ten in the morning at the rooms of the township committee in the township of Belleville, as the time and place for a hearing upon said petition.

"Notice of the time and place so fixed for the hearing was duly given to both the township and the railroad company. At such time and place a hearing was had, and the testimony of witnesses produced on behalf of the township and the company was heard, and later an inspection of the proposed street crossing was made.

"The testimony taken before the Board established that while Terry street extends to the right of way of the railroad company, on both sides thereof, it does not cross; the crossing proposed is, therefore, a 'new highway crossing' within the meaning of the third section of the act of 1909, which cannot be constructed without the permission of this Board.

"The testimony further established that the proposed crossing would be located about half way between Joroleman street on the one side and Little street on the other, both of which streets cross the tracks of the railroad company, and that the distance between these two streets is some twelve hundred feet.

"The testimony also established that the railroad station within the township of Belleville is located at Joroleman street, above referred to.

"The reason assigned at the hearing for the construction of Terry street across the tracks of the railroad was to afford a more ready and convenient means of access to the people residing in the blocks bounded by Little street and Joroleman street to the line of street railway, which is located in Washington avenue.

"To this line of street railway both Little street and Joroleman street now afford direct access.

"No other substantial reason for the creation of an added danger point, in the form of a new grade crossing within the limits of the township of Belleville, was advanced.

"Testimony, it is true, was adduced establishing that persons, in some number, daily trespassed upon the right of way of the railroad company at the point under consideration. The fact of such trespasses, however, would seem to require effective measures to prevent a continuance thereof, through action by the municipality or by the railroad company, but would not seem to afford a ground for increasing, by permission to extend Terry street across the railroad at this point, the number of those in jeopardy.

"After consideration of the testimony and personal inspection, the Board is of opinion that the application presents no peculiar or extraordinary elements which would take it outside of the policy declared by the Board in the proceeding before it in *Central Railroad Company v. Borough of Keyport*. It affirms its adherence to the policy declared in that proceeding, dismisses the petition, and declines to grant the permission sought."

NEW YORK AND LONG BRANCH

RAILROAD COMPANY

vs.

CITY OF ASBURY PARK.

PROPOSED CONSTRUCTION OF NEW GRADE CROSSING.

The New York and Long Branch Railroad Company, through its attorneys, John S. Applegate & Son, protested to the Board against the proposed extension of Cookman avenue, Asbury Park, across the tracks of the company, it being claimed that such ex-

tension would create a new and extra hazardous crossing at grade and that said new crossing is unnecessary.

Following the receipt of the reply of the municipality and a hearing of the matter at issue the following order was entered:

"The Common Council of Asbury Park gave notice of its intention to lay out and extend, by ordinance, Cookman avenue, over and across the right of way and lands of the New York and Long Branch Railroad Company at grade; thereupon the New York and Long Branch Railroad Company filed with this Board its petition requesting an investigation of the proposed laying out and extending of the avenue. To this petition an answer was filed by the municipality. Thereafter a hearing was had and witnesses were heard on behalf of the petitioner and the respondent. Before a conclusion was reached by the Board, the personnel of the Board was changed; subsequently a stipulation was entered into between the petitioner and respondent that the testimony theretofore taken be used by the Board as now constituted with the same effect as though it had been taken before it. In the meantime, a statute was enacted, supplementing the act creating this Board and prescribing its powers and duties, providing that 'no municipality shall hereafter construct, or cause to be constructed, any new street or highway across the tracks of any railroad company at grade, nor shall any railroad company lay tracks across any street or highway so as to make a new crossing at grade, without obtaining therefor permission from the Board of Railroad Commissioners.'"

"After due consideration of the testimony, the Board concludes that, in view of the dangerous conditions already existing at the Asbury Park station, indicated by its recommendation heretofore made advising the maintenance of a tower and signals at each side of the station, Cookman avenue should not be extended over and across the right of way and lands of the New York and Long Branch Railroad Company at grade, as proposed, and it therefore recommends that the ordinance, notice of intention to adopt which was given, be not adopted by the municipality of Asbury Park, and the Board hereby refuses its permission for the extension of Cookman avenue at grade as proposed."

WEST JERSEY AND SEASHORE	}
RAILROAD COMPANY	
vs.	
CITY OF GLOUCESTER.	

PROPOSED CONSTRUCTION OF NEW GRADE CROSSING.

The West Jersey and Seashore Railroad Company complained to the Board, stating that it had received notice that commissioners appointed by the city of Gloucester would meet for the purpose of opening Bergen street, in said city, across the tracks of the West Jersey and Seashore Railroad Company; that upon receipt of such notice solicitors of the West Jersey and Seashore Railroad Company notified said commissioners that the company would not allow the street to be opened across the tracks until authority was obtained from the Board of Railroad Commis-

sioners. The West Jersey and Seashore Railroad Company then filed with the Board of Railroad Commissioners a protest against the opening of said Bergen street, reciting in said protest the following:

"1. The location of proposed crossing parallel with and only 180 feet distant from Hudson street on the north and Monmouth street on the south, is in such close proximity to existing grade crossings that an additional crossing is unreasonable and unnecessary, and would result in increasing the hazard and risk of accident and injury to life and property.

"2. It would destroy the value for railroad purposes of the land now used for the delivery of freight, upon which is located a freight-house, siding, tool-house, driveway, etc."

The Board thereupon notified the mayor of the city of Gloucester and the West Jersey and Seashore Railroad Company that it would hear the protest of the railroad company against the opening of Bergen street. After said hearing the following was ordered entered by the Board:

"Notice having been given of proceedings to extend Bergen street, in the city of Gloucester, by means of a grade crossing over the tracks of the West Jersey and Seashore Railroad Company; a formal objection in writing, on behalf of said company, to such new crossing having been presented to this Board, and a copy of said protest having been sent to the municipality, the city of Gloucester, and a date for hearing having been set, and the matter now coming on for hearing before this Board, and the testimony of witnesses having been taken, and such testimony and the arguments of counsel having been duly considered, the Board concludes:

"That the protest of the West Jersey and Seashore Railroad Company against the proposed opening is well founded; and the Board hereby refuses to grant its permission for the extension of the said new street or highway, Bergen street, in the city of Gloucester, as proposed, and in so doing the Board adheres to the position formerly taken by it in the case of the Central Railroad Company against the Borough of Keyport, the opinion handed down in which will be found on page 113 of the report of this Board for the year nineteen hundred and eight."

Construction Work.

A brief description is here submitted of the more important features of the construction work incident to the following:

BERGEN HILL TUNNEL—D. L. AND W. BRANCH.

In order to facilitate the movement of suburban passenger traffic the Delaware, Lackawanna and Western Railroad Company completed and put in service, in February last, a second double track tunnel through Bergen Hill. The new and old tunnels together afford four tracks between Bergen Junction and the Company's new terminal on the water front at Hoboken.



West end of Bergen Tunnel, Delaware, Lackawanna and Western Railroad, before beginning improvements recently made.



West end of Bergen Tunnel, Delaware, Lackawanna and Western Railroad, showing new tunnel, new bridges and additional tracks.

The new tunnel, which is parallel with the old, is four thousand two hundred and eighty feet in length, thirty feet in width and twenty-three feet in height above the rail on center line. Three shafts, 14 ft. x 30 ft., inner dimensions, and two large open cuts, 76 ft. x 100 ft., were excavated from the surface to provide ventilation. The open cuts extending over both tunnels have proved of great advantage in providing ventilation to the old as well as the new tunnels. The tunnel and shafts are lined throughout with concrete and refuge niches are provided at frequent intervals to afford safety to trackmen and others engaged in the tunnel. A new feature in the tunnel is the concrete track construction. The rails are fastened to tie blocks, which in turn are embedded in concrete laid on the rock bottom of the tunnel. Guard rails are placed outside the rails and serve the double purpose of preventing the wheels from leaving the ties in case of derailment and of holding the wedges firmly in place. The advantages of this type of track are true alignment with surface not affected by frost or water; improved drainage and less liability of broken rails.

The tunnel is fully equipped with signals and will be lighted by electricity. Provision has also been made for power cables when the road is electrified. An important feature will be the freedom from objectionable smoke and gases in the tunnel.

Three of the four tracks of the tunnel can be operated in the direction of greatest traffic; that is, as eastbound tracks toward New York during the morning rush hours and as westbound tracks during the evening rush hours.

Since the construction of the tunnel there has been a noticable absence of the annoying delays to trains which formerly occurred almost daily as a result of the congested traffic conditions through the old tunnel.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD CUT-OFF.

The new cut-off line, so called, of the Delaware, Lackawanna and Western Railroad Company, begins about one-quarter of a mile west of Landing station on Lake Hopatcong, and traverses the semi-mountainous regions of Sussex and Warren counties, to a junction with the present main line at Slateford, a distance of

28.45 miles. Its completion will bring Buffalo 11.12 miles nearer New York. The new line, besides saving 11.12 miles in distance, will reduce the grade between connecting points from 60.2 feet per mile to 29.04 feet per mile; will eliminate 1560 degrees of curvature and eliminate 2971 lineal feet of tunnels. One-half hour will be saved in the running time of passenger trains and one hour in running time of freight trains, while freight train loads, hauled to one standard engine, will be increased by 45 per cent.

A notable engineering feature of the new line is the embankment across the Pequest Valley, which will be three miles in length and from 75 to 110 feet in height and will contain 6,625,000 cubic yards of material. This fill will be the largest railroad embankment in America. There will be no grade crossings on the new line, of either railways or highways. To obviate such crossings will necessitate the building of sixty-five concrete structures varying in span from three to one hundred and fifty feet. A bridge is being built across the Delaware river consisting of five 150-foot concrete arch spans, two 120-foot arch spans and two 33-foot arch spans. The structure will be approximately 1,450 feet in length, with a height of 65 feet above ordinary high water to the base of rail.

The track system is to be supported by spandrel arches resting on the main arch rings. Another large concrete structure will be built over Paulins Kill river. This bridge is to be 1,100 feet in length and 115 feet above the water level. These two structures will be the largest railroad bridges which, up to the present time, have been built of concrete.

HUDSON AND MANHATTAN RAILROAD TUNNELS.

During the past year two avenues of travel under the Hudson have been opened providing direct underground communication between New York and the stations of the Pennsylvania, Erie and Lackawanna Railroads in New Jersey.

It has been found necessary, to properly accommodate the traffic, to schedule tunnel trains between all stations at least every three minutes during the morning and afternoon rush hours, and every five minutes during the balance of the day and night.

Between the Erie Railroad and the Pennsylvania Railroad stations in Jersey City and the terminal in New York, trains run every $1\frac{1}{2}$ minutes during rush hours and every $2\frac{1}{2}$ minutes during the balance of the day and night. The running time between the New York terminal and Jersey City is three minutes; Jersey City and Erie station, three minutes; Erie station and Hoboken, four minutes; Erie station and Twenty-third Street, New York, eleven minutes; Hoboken and Twenty-third Street, New York, twelve minutes. It is estimated that about fifteen thousand passengers per day are diverted from the Hoboken ferries to the tube; about ten thousand per day from the Erie ferries and from the Pennsylvania ferries about ten thousand per day. This diversion of passenger traffic affords a much needed relief, as the boats were over-crowded during the rush hours—morning and evening.

OPEN CUT OF ERIE RAILROAD COMPANY AT BERGEN HILL.

This cut is almost one mile in length, sixty feet wide at the base and one hundred feet wide at the top, being two feet wider than the Marble Hill cut-off on the New York Central Railroad and the largest work of the kind in the country.

The track arrangement through the open cut, and signal control, will make it possible to move at one time four passenger trains in one direction on each of the three-block signal sections between Bergen and Jersey City, or twelve in all at one time, between Bergen and Jersey City. The signal control will also provide for varying the movements of these trains to make provision for moving three trains at one time, in one direction, and nine trains in the other direction between these two points. The new cut will be used exclusively for passenger traffic. The system of connections at the west end of open cut will permit three trains to leave the terminal at the same time, running abreast through the cut, and to diverge to the various lines without interference for a distance of nearly six miles, and the reverse movement may also be made. This arrangement will give the Erie Suburban line greatly improved facilities and should provide for the future growth of suburban business without overtaxing the capacity of the road.

The open cut feature will also assure a greater degree of safety and eliminate the gas and smoke nuisance, which has been a source of discomfort to the traveling public.

RAILROAD CROSSING ELIMINATED.

An important and very dangerous steam grade crossing one quarter of a mile west of Bergen tunnel where the Morristown and Boonton Branch tracks of the Delaware, Lackawanna and Western Railroad and those of the New York, Susquehanna and Western Railroad and Erie Railroad cross, has been eliminated; the Morristown and Boonton Branch tracks having been carried over the tracks of the New York, Susquehanna and Western and Erie Railroad Companies.

Prior to the change the nine tracks of the New York, Susquehanna and Western Railroad and the Erie Railroad were crossed by the Morristown Branch and five tracks were crossed by the Boonton Branch. Passing over these tracks daily were two hundred and six passenger trains both east and westbound on Morristown Branch, thirty-nine on the Boonton Branch and fifty-one on the New York, Susquehanna and Western. About ninety per cent. of these trains crossed between 7 A. M. and 6 P. M. All coal and freight trains on the Delaware, Lackawanna and Western Railroad passed over this point and in addition there was almost a continuous switching movement on the New York, Susquehanna, Western and Erie tracks. All the tracks were protected by interlocking operated from a tower at the junction, but in spite of the utmost care there were innumerable delays on both roads and numerous accidents and derailments. All the tracks of the New York, Susquehanna and Western and Erie have been depressed, and the Morristown and Boonton Branch tracks carried over on through girder spans. The depression of the tracks necessitated change of grades on both lines, construction of a number of bridges, long retaining walls and heavy embankments; also a reinforced concrete signal tower with an electro-pneumatic machine to control the switches at the junction of the Morristown and Boonton Branches, ends of the tracks and cross-overs.



View of dangerous crossing of tracks of the New York, Susquehanna and Western Railroad by tracks of the Morristown and Boonton Branches of the Delaware, Lackawanna and Western Railroad.



Detail of improvement for elimination of crossing described above.

Inspections.

The following brief extracts from Inspectors' reports are submitted. These extracts indicate the general condition of the roads reported upon and the recommendations made for improvements, where the same were submitted after the inspection.

ATLANTIC CITY RAILROAD.

Main Line.

Extends from Camden to Atlantic City, a distance of fifty-five and five-tenths miles. All tie renewals have been made and other work done, pertaining thereto, to keep the track and road bed in a strictly first-class condition.

Bridges.—The fifteen bridges on this line are all in good condition. The first bridge out of Camden, a two-span pile trestle, is soon to be replaced with a concrete arch.

There is one drawbridge, a double track, deck, plate girder span, over the Thoroughfare, at Atlantic City.

Gloucester Branch.

This branch extends from Gloucester Junction to Greenlock, a distance of eleven miles.

All tie renewals have been made and additional ballast has been placed under track to keep it in good condition.

Bridges.—There are six trestle bridges on this branch, in fair to good condition, and sufficient for the traffic except as noted below. Repairs have been made to the trestle between Mount Ephraim and Bellmawr as recommended last year.

Recommendations.—Mantua Creek trestle should have one new cap and necessary stringer renewals made.

Farm crossing south of Glendora should have new cap and ties renewed where necessary.

Trestle south of Hill Top should have renewals made to guards and ties.

Williamstown Branch.

Branch extends from Williamstown Junction to Mullica Hill, a distance of nineteen and seven-tenths miles. The track has been improved since last inspection, made September 23, 1908, by replacing all the light rail with seventy-pound second; also a larger amount of ballast placed under track. Sufficient tie renewals have been made to keep the track in good condition.

Bridges.—There are three trestles on this branch, all in good condition.

Cape May Branch.

Extends from Winslow Junction to Cape May, a distance of fifty-four and two-tenths miles. The conditions are practically the same as on last inspection, made September 23, 1908, with the exception that betterments have been made by placing eighteen hundred tons of new ninety-pound rails in track. Three miles more will be laid this year, making the entire line of ninety-pound rail. Tie renewals have been made and all other work done to keep this branch in first-class condition.

Bridges.—The eleven bridges on this branch are in good condition. There is one deck-plate girder drawbridge, located at Tuckahoe.

Sea Isle City Branch.

Extends from Ocean City Junction to Sea Isle City, a distance of eight and one-tenth miles. All the light rails have been replaced with second seventy; ballast has been added in good quantity; sufficient tie renewals are now being made to keep the road in a safe condition for the traffic, which consists of ten trains each day during the summer months, and two trains each day thereafter.

Smash boards have been placed at Ben Hand's and Corson's Inlet draws, as recommended.

Bridges.—There are four trestles on this branch, in two of which are gallows frame drawbridges; namely Ben Hands, and Corson's Inlet. These have had additional stringers placed in them since last inspection, as recommended. The bridges are all in fair condition and safe for the traffic. Trains are limited to ten miles per hour over the entire branch.

Recommendations.—On trestle approach to Corson's Inlet a few new ties should be placed, and the ties which are beginning to bunch should be straightened out and respaced.

Ocean City Branch.

Extends from Tuckahoe Junction to Ocean City, a distance of thirteen and seven-tenth miles. This branch has been very much improved since last inspection, made September 23, 1908. All the light rail has been replaced by second eighty-pound; cinder ballast has been placed under track across the meadows, in large quantity. Sufficient tie renewals have been made. Crook Horn draw has been protected by smash boards, as recommended. The track and roadbed are now in good condition.

Bridges.—There are six small trestles on this branch, in fair to good condition, sufficient for the traffic. There is a gallows frame drawbridge over Crook Horn. The trestle over Edwards Creek, noted for renewals last year, has been examined and found to be in sound condition except for some sap rot on top of stringers. As there are one 10" x 16" and two 8" x 16" timbers on 12' spans under each rail, this bridge is amply strong for the service.

BALTIMORE AND NEW YORK RAILROAD.

This road extends in New Jersey from the Arthur Von Kull bridge to Cranston, a distance of five miles.

The roadbed has been improved since last inspection made on July 9, 1908, by additional shoulder placed on fills; also stone ballast in good quantity has been placed under track. The track and roadbed are in good condition.

The recommendation made on last inspection that a high signal be placed at the Lehigh Valley crossing has been complied with. The smash board has not been installed for the protection of the Arthur Von Kull drawbridge as recommended. This recommendation is repeated and ask that it be done as early as possible.

Bridges.—Bridges on this line are in fair to good condition. Repairs are being made to timber trestles keeping them safe for

slow speed till they can be filled. A small quantity of fill has been placed at west end of long trestle in Elizabethport.

Bridge 24 over Kleinfelder's run has been replaced with a concrete culvert. Bridge 23 over Martin's run is being rebuilt in like manner. Repairs and adjustments have been made at Arthur Kill drawbridge.

BARNEGAT CITY RAILROAD.

This road, commencing June 25th, will be operated by the Tuckerton Railroad, agent for the Pennsylvania Railroad. It extends from Barnegat City Junction to Barnegat, a distance of eight and seven-tenth miles.

The road stopped operating on December 30th last, without complying with recommendations made by the Board that eight hundred ties should be placed to each mile of track. The recommendations are now being complied with and will be completed before June 25th. The sixty-pound rails are in fair condition, and with light traffic the road will be safe for a reduced rate of speed. Not less than ten per cent tie renewals should be made each year.

Recommendations.—That the maximum rate of speed be twenty miles per hour.

Bridges.—The two bridges, near Barnegat City, recommended for rebuilding last year, are being entirely rebuilt, and should be completed in a few days. The remaining bridges are all in good condition except the fifth one north of Harvey Cedars, which should have repairs made to timber bulkheads.

CENTRAL RAILROAD OF NEW JERSEY.

New Jersey Central Division—Main Line.

Extends from Jersey City to Phillipsburg, a distance of seventy-two and two-tenth miles.

Betterments have been made on this line during the past year by placing in track fifty-five miles of ninety-pound steel rail, replacing seventy-six, eighty and eighty-five pound; twenty-two miles of one-hundred-pound rails will be placed in track within the next ninety days, after which the main line will have in all

one hundred eighty-six miles of ninety and twenty-two miles of one-hundred-pound rail in its tracks. During past year, forty-three thousand yards of stone ballast have been placed on roadbed and under track; seven thousand more will be added this year.

Tie renewals have been made in sufficient numbers and other work, pertaining thereto, done to keep this road in first-class condition.

Recommendations.—That all trees overhanging or close to top of cuts which in falling would foul main track, be taken down.

Bridges.—Recommendations made in former reports are being carried out. Inside guard rails are being placed in all bridges. The longest and most important ones are receiving the first attention. This work will probably be completed this summer. Points have not, in some cases, been protected by beveling, or placing sloping blocks in front of them. The Company has a cast-iron nose piece in process of manufacture for the protection of guard rail ends. It will be put on as furnished. The bridges over 30 feet in length which at present have no inside guard rails, and the bridges having inside guard rails with unprotected ends are listed in the following recommendations.

Work of rebuilding the Newark Bay trestle, bridge No. 21, is completed and the structure is now in first-class condition. Otherwise than as noted the bridges on this line are in good condition.

Recommendations.—Place inside guard rails on the following bridges: 24, 25, 26, 27, 30, 38, 47 and 76.

Place sloping blocks, protecting guard rail ends, on bridges 87, 89, 90, 98, 118, and 136.

Bridges 28 and 29 should have guard rails lengthened.

Bridge 15, renew sloping blocks protecting guard rail ends.

High Bridge Branch.

Extends from High Bridge to Hibernia, a distance of thirty-four miles.

It was recommended in 1907 that interlocking towers and derails be installed at both steam grade crossings, viz., Lake and Ferremont. This year the Company agreed, and it was approved by the Commission, that interlocking cabins and signals be in-

stalled, all trains to come to a stop before passing over crossing. Material is now on the ground and work under way to complete the work as recommended.

It was also recommended that trees standing on right of way should be taken down. This has not been done. It was recommended that derails be installed at Dover Draw. It was afterwards agreed that smash boards might be substituted. This work is now under way. All other recommendations made in 1907 and 1908 have been complied with.

Recommendations.—That the trees standing on side cuts west of High Bridge, also on top of cut just east of Dover, and one decayed tree and a large oak just west of Beach Glen, be taken down.

Bridges.—The lighter bridges on this branch are being rebuilt in substantial manner, capable of carrying the heaviest power. Those which will be completed this year are Nos. 257, 258, 259, 261, and 262. The remaining bridges are in good condition. A few have guard rail ends unprotected. They are listed below:

Recommendations.—Place beveled blocks protecting ends of guards rails on bridges Nos. 248, 249, 251, 253 and 255.

Dover and Rockaway Division.

The bridges on this branch are all in good condition.

Hibernia Branch.

Recommendations.—Place inside guard rails with protected points on bridges 283 and 284.

Place guard timbers, notched over ties, on bridge 286½.

Place new guard timbers on bridge 284.

Ogden Mine Branch.

Extends from Hopatcong Junction to Edison, a distance of fifteen and three-tenth miles.

Tie renewals have been made and other work pertaining thereto has been done, to keep the track in good condition for the traffic.

Bridges are all in good condition.

South Branch.

Extends from Somerville to Flemington, a distance of fifteen and five-tenth miles.

Betterments have been made on this branch since last inspection September 28, 1908, by replacing seven miles of sixty-seven and seventy-pound rail, with eighty-pound second; the remaining eight miles and five-tenths will be replaced this year. Sufficient tie renewals have been made and other work pertaining thereto has been done to keep the track and roadbed in good condition.

Recommendations made in 1907 and 1908 have been complied with.

Bridges.—Bridges are all in good condition, except for the following minor recommendations.

Recommendations.—Bridges 226 and 235 should have beveled blocks placed at guard rail points.

Perth Amboy Branch.

Branch extends from Elizabethport to Perth Amboy, a distance of eleven and six-tenths miles.

The track and road bed are in practically the same condition as on last inspection. Tie renewals have been made and all other work pertaining thereto has been done to keep the track in first-class condition.

Bridges.—All bridges on this branch are maintained in safe condition.

Recommendations.—That inside guard rails be placed on all bridges, thirty feet in length and over, to extend not less than thirty feet on the ground at the facing end.

Newark and New York Branch.

It extends from Newark to Communipaw, a distance of seven and one-half miles. The track and roadbed are in practically the same condition as on last inspection. Sufficient tie renewals have been made and all work pertaining thereto has been done to keep the track in good condition.

Bridges.—The bridges on this branch are all in good safe condition.

New Jersey Southern Division—Main Line.

The main line extends from Red Bank to Bayside, a distance of one hundred and four and five-tenths miles.

Betterments have been made since last inspection, September 29th, 1908, by replacing twelve and one-half miles of the seventy pound rail with second eighty-five; an additional ten miles will be replaced within the next ninety days. Duquesne angle bars are replacing the old ones on the seventy-pound rail west of Winslow Junction. Sufficient tie renewals have been made and other work pertaining thereto done to meet the requirements.

Bridges.—Bridges are all in good condition unless otherwise noted. Repairs to trestles recommended in 1908 have not been made except in case of bridge 95, which has been rebuilt. Inside guard rails with protected points have not been placed on all bridges over thirty feet long as recommended. The company states its intention to have them all on this year. The bridges are listed in detail in the recommendations. No trestles east of Winslow Junction have been rebuilt with steel spans since 1907. They are maintained as trestles in safe condition. All trestles on this line have two 8" x 16" stringers on 10' spans except those which have been recently rebuilt. These latter are standard, with three 8" x 16" stringers on 12' spans. In either case they are amply strong for the traffic.

Recommendations.—Renew guard timbers on bridges 81, 83, 86, 97, 99. Renew ties and stringers on bridge 87 and ties on bridge 99. Place guard rails on bridges 48, 59, 73 and 92. Place sloping blocks protecting ends of guard rails on bridges Nos. 53, 55, 74, 77, 78, 79, 82, 93, 94, 96 and 102. Renew ties on bridge 93. Repair guards on 94. Repair stringers on 102.

Cumberland and Maurice River Branch.

Extends from Bridgeton Junction to Bivalve, a distance of twenty-two miles.

Sufficient tie renewals have been made and all other work pertaining thereto has been done to keep the track in good condition.

Recommendations made in 1907 and 1908 have been complied with.

Bridges.—The five small trestles on this branch are in good condition. Guard rails have not been protected as recommended in 1908, and the recommendation is repeated.

Recommendations.—Place sloping blocks protecting guard rail ends on bridges Nos. 104 and 105.

Sound Shore Branch.

Extends from Elizabethport to Chrome, a distance of seven miles. This branch has been well maintained and is in good condition.

Smash boards have been installed at Rahway draw as recommended.

Bridges.—There are eight bridges on this line, all short pile trestles. The longest one is over the Rahway river and contains a through plate girder draw, hand operated, and resting on masonry center pier and abutments. This draw is left open between the hours of 6:25 P. M. and 7 A. M.

There is a similar draw in bridge No. 3 over Pyles Creek, but this draw is never used. Both running and guard rails are laid continuously across it and are spiked down.

The bridges all have timber guards notched over and bolted to ties. Those of more than three spans have inside guard rails fitted with iron beveled points.

The condition of all bridges is good, except that in No. 6 and No. 7 some repairs will soon be needed to a few stringers and ties.

Toms River Branch.

Extends from Lakehurst to Barnegat, a distance of twenty-two and two-tenths miles. The track is practically in the same condition as on last inspection made October 1st, 1908.

Tie renewals have been made to meet the requirements and the road is in safe condition for the traffic.

Bridges.—The bridges on this branch are all in good condition, except No. 64. This should have new ties, guards and stringers. Inside guard rails with protected points should be placed on all spans over thirty feet in length.

Sea Shore Branch.

Extends from Matawan to Eatontown, a distance of twenty-five and six-tenths miles.

The branch is in practically the same condition as on last inspection, made October 1st, 1908, with the exception that betterments have been made by laying one mile of eighty-five pound second steel rail through Atlantic Highlands, replacing the lighter rail. Sufficient ties have been placed in track to meet the requirements. The road is in good condition as far as Long Branch. While the condition is not so good south of this point, it is sufficient for the traffic that runs over it. Smash boards have been placed for the protection of Shrewsbury draw, as recommended.

Bridges.—All the bridges on this line are in good condition except No. 29. The recommendations made regarding guard rails are being carried out. Five of the bridges already have the guard rails in place. Work will continue till all are so protected. No. 29 is to be rebuilt with steel I-beam stringers, material for which is on the ground.

Freehold Branch.

The branch extends from Matawan to Freehold, a distance of twelve miles.

The rails are in practically the same condition as on last inspection, made October 1st, 1908, less the natural wear. Betterments to roadbed have been made by placing large quantities of cinder ballast under track. Sufficient tie renewals have been made to keep the track in a safe condition for the traffic.

Bridges.—The bridges have been maintained in a safe condition. I noticed the stringers in bridge No. 3 look a little old.

Recommendations.—That inside guard rails be placed on all bridges thirty feet in length, and over, as recommended last year. That the unsound stringers in bridge No. 3 be replaced.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD.

Main Line.

Betterments have been made for the year ending May 31st, 1909, as follows:

Thirty-four hundred and forty-five tons of new ninety-one-pound steel rails have been placed in main line between Hoboken and Washington, three hundred and thirty tons between Washington and Delaware river. Thirty-four thousand three hundred and fifty-three yards of stone ballast have been placed under track.

Sufficient tie renewals have been made to meet the requirements and keep the track in first class condition.

Recommendations.—That trees standing on right of way on slope east of Summit westbound track, about two miles west of Oxford on top of cut, eastbound track; two trees on curve east of Bridgeville, westbound track; and trees west of Manunka Chunk for a long distance on westbound track, should be looked over carefully and where found to be on right of way, taken down.

That shoulder be placed at the end of derail where the Rock-away Branch connects with main line, east of Dover, a sufficient distance to prevent an engine from turning over at an ordinary rate of speed in case of derailment; also that the work be pressed in filling out at the end of derail at Morristown.

Morristown Line.

Bridges.—Bridges on this line are all in good condition. Work is under way at New York, Susquehanna and Western Railroad grade crossing, raising grade to carry Lackawanna line over the Susquehanna. This involves alterations to the bridges between this location and the Hackensack river, which alterations are now in progress.

At Shippenport, two new bridges are being built over the canal and highway. The I-beam between Mountain station and South Orange is to be rebuilt. There are three drawbridges on this line: Hackensack and Passaic rivers and Morris canal.

Recommendations.—Place inside guard rails with protected points on the following bridges: Harrison avenue, Harrison; Passaic River draw; High street, Newark; Main street, Milburn; Water street and Emmet avenue, Morristown.

Warren Railroad.

Bridges are all in good condition except the arch over Highway at Manunka Chunk. Work of replacing this arch with a deck plate girder bridge has been begun.

Boonton Branch—Rockaway Loop.

The Boonton Branch extends from Hoboken to Denville Junction, a distance of thirty-three and ninety-eight hundredths miles. The Rockaway Loop extends from East Denville Junction to West Dover Junction, a distance of three and sixty-five hundredths miles.

All tie renewals and work necessary thereto have been done to keep the track in the same first-class condition as heretofore.

Recommendations.—That the trees standing close to edge of top of cut west of High Bridge, and west of Paterson, be taken down.

Boonton Branch.

Bridges.—Bridges are all in good condition except as noted below. Rockaway River bridge at Boonton has not had a new deck as recommended. A new timber or solid concrete deck will be placed on this bridge as soon as plans now in preparation are completed.

New timber guards have been placed on the canal bridge at Boonton. The ties are in fair condition. These repairs are sufficient for the present.

The two through plate girder bridges have been completed over canal, east and west of Paterson.

The masonry arch at Athenia is to be replaced this year by a deck plate girder span. The steel has been delivered for this bridge. Inside guard rails have not been placed on Passaic River draw as recommended in 1908. They have been placed on

Hackensack River draw. A bridge is in process of construction over the new location of the Greenwood Lake Railroad.

Work of eliminating Susquehanna grade crossing is in progress as noted under Morristown line.

New bridges over Erie tracks at West End are almost completed.

The through-pin span over Hoboken avenue will be replaced by a through-plate girder this fall.

There are three drawbridges on this branch: Over Morris Canal feeder, Passaic and Hackensack rivers.

Recommendations.—Point masonry, west abutment, High Bridge, and make necessary tie renewals. Place sloping blocks in front of guard rail points on bridge over Newark Branch of Erie Railroad. Place inside guard rails with protected points on Passaic River draw and Stuyvesant Avenue bridge, Lyndhurst.

Rockaway Loop.

The two bridges on this line are in good condition.

Passaic and Delaware Branch.

Extends from Summit to Gladstone, a distance of twenty-one and fifty-two hundredths miles.

All the light rails have been taken up and replaced with second eighty pound; sufficient tie renewals have been made and ballast placed in track where required. This road is in good condition. Automatic electric signals are in operation between Summit and Bernardsville.

Bridges.—Bridges on this branch are all in good condition. Abutments of Passaic River bridge have been repaired as recommended in 1908.

Recommendations.—Place inside guard rails on the plate girder bridge over Peapack brook, east of Peapack station.

Chester Branch.

Extends from Chester Junction to Chester, a distance of ten and four-tenths miles.

Recommendations.—That a derail be placed in switch west of station at Ironia.

Bridges.—First trestle east of Sucasunna has not had guards repaired as recommended in 1908.

Black River trestle east of Ironia has had timber wings repaired as recommended.

Recommendations.—Make necessary repairs to ties and guards on first trestle east of Sucasunna.

Sussex Branch.

Extends from Netcong to Franklin Furnace and from Branchville Junction to Branchville, a total distance of thirty and five-tenths miles.

All the light rails between Branchville Junction and Branchville have been replaced with seventy-five-pound second; the only light rails now on the line are between Branchville Junction and Franklin Furnace, which are in good condition.

Sufficient tie renewals have been made; additional ballast has been placed in track and all other work done pertaining thereto. This has placed this branch in good condition. Automatic electric signals are now being installed between Netcong and Newton.

Recommendations.—That interlocking signals be installed at Franklin Junction in connection with the New York, Susquehanna and Western Railroad; that shoulder be placed on fill on curve just west of where new line crosses, east of Andover.

Bridges.—The bridges are all in good condition. There is one bascule drawbridge over the Morris Canal.

Recommendations.—Place inside guard rails on the drawbridge over the Morris and Essex Canal.

Branchville Branch. (Subdivision of Sussex Branch.)

These bridges are in fair condition. On many of them ties are growing soft and should have necessary renewals made this year.

Hampton Branch.

Extends from Washington to Hampton Junction, a distance of four and eight-tenth miles.

Sufficient tie renewals have been made and all other work done to keep the track and roadbed in good condition.

Recommendations.—That trees be taken down which are standing on right of way east of overhead bridge, west of Changewater station.

Bridges.—Masonry has been grouted and pointed on Musconetcong river bridge at Changewater. Piers have been extended in concrete, supporting the overhanging ends of shoes. The ties are in fair to poor condition, and should be renewed where necessary.

Phillipsburgh Branch.

Extends from Washington to Phillipsburgh, a distance of thirteen and nine-tenth miles.

Recommendations.—That a derail be placed in the switch running up on the hill east of Phillipsburgh, not more than forty feet from frog.

Bridges.—Bridge at Stewartsville has been replaced by a single track through plate girder span.

Tie renewals, as recommended, have been made on bridge east of Stewartsville. The remaining bridges are in good condition.

Newark and Bloomfield Branch.

This branch extends from Roseville Junction to Montclair, a distance of four miles. Sufficient tie renewals have been made and other work done to keep the track in good condition. Interlocking has been installed at the end of double track, Bloomfield, since last inspection.

Bridges.—The trestle over Moffat's Pond has been thoroughly renewed. Inside guard rails with beveled iron points have been placed on all bridges over thirty feet long, as recommended.

The bridge over the highway, east of Glen Ridge, a twelve-foot span with timber stringers, has not been repaired. The timber wall caps are decayed and the upper part of wall under ends of stringers is in poor repair. The timber deck is in fair condition.

Remaining bridges on the branch are in good condition.

Recommendations.—Make necessary repairs to upper part of masonry abutments and renew wall caps on bridge over highway east of Glen Ridge. When guard timbers are renewed, they should be notched over ties and bolted to same.

ERIE RAILROAD.

Main Line.

Main line extends between Jersey City and the State line, a point one mile west of Mahwah, a distance of thirty miles. The track has been well maintained and is in practically the same condition as on inspection of September 14th, 1908.

Tie renewals are now being made in sufficient number to meet the requirements. This road is fully equipped with automatic signals and interlocking towers at all junctions and other important points, for the safe operation of its trains.

Bridges.—The bridges are all maintained in safe condition. Some of the floor timbers are quite old and have deteriorated considerably. Renewals should be made as noted below:

Bridge 6.30; repair guards.

Bridge 7.30; repair ties.

Bridge 10.22; repair ties.

Bridge 28.73; repair ties and guards.

Bridge 28.01; repair guards.

Bridge 28.14; repair guards.

Bridge 28.52; repair guards.

Bridge 28.82; repair guards.

Bridge 30.01; repair ties and guards.

Bridge 30.11; repair ties and guards.

All bridges over thirty feet in length should have inside guard rails with protected points.

Trains are operated across Hackensack river bridge No. 5.48 at a very low speed, pending its rebuilding. Bridge 16.20 over Governor street, Paterson, has columns reinforced by temporary shoring.

NORTHERN RAILROAD OF NEW JERSEY.

Road extends in New Jersey from Bergen Junction to New York State line, a point just east of Tappan, a distance of twenty and one-half miles.

The track in different places needs surfacing, which will be done as the tie renewals are made. One and one-tenth miles of eighty pound rail and two hundred and seventy ties to the mile will be placed in track this year, which will be sufficient for the safe operation of the road. The track has been well maintained since last report and is in good condition.

Bridges.—There are sixteen small openings on this line, all maintained in safe condition, but the timber in some of them is becoming old and will have to be renewed in the near future. A list of the bridges which should receive attention follows:

Bridge 17.91; ties poor on westbound track; guards poor on eastbound track.

Bridge 15.88; ties poor on westbound track.

Bridge 15.56; ties and guards poor on eastbound track.

Bridge 7.49; poor bolsters.

Bridge 6.31; backwalls should be rebuilt on eastbound track.

Bridge 6.20; repoint masonry and repair bolsters.

Two culverts between New Durham and Homestead should have new timber guards. In addition, it is recommended that inside guard rails be placed on bridge No. 12.53, located on curve.

BERGEN COUNTY SHORT CUT.

This road extends from Rutherford Junction to Edgewood Junction, a distance of ten miles. The track has been well maintained and sufficient tie renewals are now being made to keep it up to the same standard as heretofore.

Bridges.—The five bridges on this line are all in sufficiently good condition for the heavy traffic.

Inside guard rails are placed only on bridge 2.2 over Saddle river.

Newark Branch.

This branch extends from Paterson to Hackensack bridge, a distance of seventeen miles. The track has been well maintained since last inspection and is in good condition. Tie renewals are being made in sufficient quantity for the safe operation of the road.

A new system of signals is being tested so that the operator and engineer can communicate with each other by telephone at all times.

Bridges.—West of Baleville the bridges are all in good condition.

Bridge 10.41 should have beveled wooden blocks spiked in front of guard rail points, or have the iron points beveled off.

East of Baleville, bridge 7.54 is being rebuilt.

Bridge 5.49 has had ordinary timber renewals made. It is safe for the limited loading and restricted traffic at this point.

NEW JERSEY AND NEW YORK RAILROAD.

This road extends from New Jersey and New York Junction to the State line, west of Montvale, a distance of eighteen miles. The track is in practically the same condition as on last inspection.

Sufficient tie renewals have been made and other work done pertaining thereto, to keep the track in good condition for the traffic. All recommendations made in 1908 have been complied with, with the exception of placing toilets at the several stations where there are none.

Recommendations.—That toilet facilities be afforded at the following stations: Montvale, Park Ridge, Woodcliffe Lake, New Milford and Williams Avenue.

NEW YORK AND GREENWOOD LAKE RAILROAD DIVISION.

Bergen Junction to Sterling Forest.

Extends from Bergen Junction to Sterling Forest, a distance of forty-three miles. The track on this road is in first-class condition as far west as Ringwood Junction; from that point to Sterling Forest the rails are light, sixty-three pounds to the yard. Track is well tied and ballasted and safe for the traffic, at the rate

of speed which is maintained over it, namely, thirty miles per hour. Sufficient ties were put in to keep it up to the standard last year and the same is being done this year.

Recommendations.—Clean ditches in mud and rock cut west of Arlington. Clean ditches and take down trees near top of big cut west of great Notch.

Bridges.—Bridges are all in good condition, except for the light repair work noted below. Bridge 3.86, repair guards. Bridge 4.15, repair guards. Bridge 22.52, repair guards. Bridge 37.49, repair guards and ties. Bridge 37.65, repair guards and ties. Bridge 38.35, repair guards.

Piles under bridge 19.58 should be examined and have such renewals made as may be necessary.

Caldwell Branch.

This branch extends from Great Notch to Essex Fells, a distance of six miles. The track has been well maintained and is in good condition. Sufficient ties are being placed in track to meet the requirements.

Recommendations.—Clean ditches, take down loose stone and also trees close to edge on top of cut at overhead bridge east of Caldwell.

Bridges.—The bridges on this branch are maintained in safe condition for the traffic. In accordance with the recommendations made last year bridge 0.50 has been rebuilt, and bridge 2.62 is being repaired. Bridge 1.76 should have repairs made to ties and guard. Inside guard rails have been placed across this bridge, but the ends remain unprotected. Beveled blocks should be spiked to ties protecting these ends. The remainder of trestle is in fair condition. Speed is restricted to ten miles per hour across this and bridge 1.90. Bridge 1.90 should have new guard timbers. Inside guard rails should be put on bridges Nos. 1.90, 2.62 and 5.64.

Ringwood Branch.

Extends from Ringwood Junction to Ringwood, a distance of three miles.

There are four passenger and two freight trains passing over this branch daily. A sufficient number of ties are being placed in the track to meet the requirements and keep it in safe condition.

Bridges.—All the bridges are timber trestles. The following repairs should be made:

Bridge 0.59 should have repairs made to caps and guards.

Bridge 1.63, ties and guards should be repaired.

Orange Branch.

This branch extends from Forest Hill to West Orange, a distance of four miles.

Sufficient tie renewals have been made and other work pertaining thereto has been done to keep the track in good condition.

At Watsessing Junction where the Bloomfield Branch of the Delaware, Lackawanna and Western crosses this branch at grade, the derails are being moved back five hundred feet on the Bloomfield Branch and three hundred and fifty and four hundred feet on the Orange Branch. Switches prevent their being made uniform.

The recommendation made relative to the West Orange Station is being complied with. I noticed a number of low switch stands at facing point switches. They should be replaced with high stands.

Bridges.—There is one standard plate girder on pile trestle and three openings on this line. Three are in good condition; two need some repairs.

Recommendations.—That high stands be placed at all main track facing point switches when they are not connected with signals.

That bridge 3.04 have new floor and masonry repaired. Bridge at Edison's Coal Trestle should have new guard rails and ties renewed where required.

LEHIGH AND HUDSON RIVER RAILROAD.

This road extends from Mansfield street to the State line, east of Vernon, a distance of forty-seven miles. The road has been improved since last inspection by laying additional ballast and

renewing ties. Three hundred tons of new one hundred pound steel rails will be placed in track across the Vernon Meadows, which, with the ten foot ties, will greatly aid in keeping the track in line and surface. With the percentage of tie renewals, which should be made before September 1st this year, the road will be in good condition.

Changes have been made in the yard at Franklin Junction so that trains in switching are not obliged to cross the New York, Susquehanna and Western Railroad crossing.

Recommendations.—Place derail in switch at Sheldon's; make the annual percentage of tie renewals before September 1st, this year; take down all trees standing on right of way which in falling would foul main track. The order at Franklin Junction to be strictly enforced, *i. e.*, that the opposing signal must be kept locked while a train having the right of way is using the crossing.

Bridges.—The recommendations made in last year's report have been in part completed, and the work has been done in a thorough manner. The remaining recommendations are in process of being carried out. Repair work should continue till all the smaller openings are replaced with structures of good modern design. Culverts, with concrete walls and slab floors carrying ballasted track, are being put in wherever possible when renewals are made. These may reasonably be expected to give good service with a minimum cost for maintenance. In several places cast iron pipe could be substituted and should be wherever possible.

Bridge No. 104, east of Hamburg, has been replaced with a modern, single track, through plate girder span on concrete abutments which are built to receive future double track.

The Delaware River bridge at Phillipsburg is new, having been built in 1907. All new work is designed on Cooper's specifications for E. 50 loading.

A list of the most necessary openings particularly needing attention, with the recommendations for each, follows:

- 75. Should have walls rebuilt. Might be replaced with pipe. One new tie needed at west end.
- 90. Should have inside guard rails.
- 94. Should have abutments rebuilt.

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100, 101, 102. Should be replaced with pipe.

103. Repair ties.

105, 106 and 108. Point masonry.

109, 110. Rebuild.

116. To have pipe. Pipe now on ground.

117. Place guard timbers on side track.

118. Shored. Should be rebuilt.

120, 121. Repair masonry.

123. Repair guard timbers.

124, 125. Shored. Should be rebuilt.

128. Is now rebuilding.

130. Shored. Should be rebuilt.

Place pipe at Green's crossing, one mile east of Great meadows.

140. Place guard timbers on both side tracks.

143. Rebuild.

144. Repair backwalls and repoint masonry.

152. Place guard timbers on side track.

155. Repair guard timbers.

158. Point masonry; 160. Repair masonry.

161. Rebuild.

162. Point west abutment.

Protect all guard rail points with beveled blocks, sloping from top of rail downward to ties.

LEHIGH AND NEW ENGLAND RAILROAD.

The road extends in New Jersey from Liberty Corner to Swartswood Junction and from Hainsburg Junction to the Delaware river, a distance of twenty-three and nine-tenths miles. The track has been improved since last inspection made.

A large number of tie renewals have been made and a great many thousand yards of ballast have been placed in roadbed. Eleven thousand ten-foot ties are now being placed over the Meadows, which will very much improve the track in this location. Nine thousand ties, in addition, will be placed on other parts of the line this year. While the track is not first class it is in fair condition and safe for the traffic. All track recommendations made in 1907 and 1908 have been complied with, with the

exception that derails have not been placed in all of the switches where needed, neither have interlocking signals been installed at Augusta.

Recommendations.—That derails be placed in both switches at Pellettown; also at Sussex Junction and Swartswood Junction, if cars will run out on main line if brakes are released. That the large tree standing on right of way east of Sussex Junction switch be taken down. That interlocking signals be installed at Augusta crossing, 250 feet from crossing, signals to govern both main track and sidings. It must be understood and agreed that all trains will stop before passing signal; safety signal not to be given until train has come to full stop and not changed until train using crossing has cleared same.

Bridges.—The oldest bridges on this line are being gradually replaced by new ones of modern design.

Bridge 33, near Sussex, is new. Inside guard rails have been placed on it and on the Delaware River bridge and Columbia viaduct.

Following are the bridges listed for renewal in 1909:

Cattle passes Nos. 2, 4, 10, 11, 23, 36 and 40 are to be rebuilt in concrete.

Trestles Nos. 13, 15, 19, 21 and 41 to be rebuilt with standard pile trestles. No. 43 is now rebuilding.

Trestle No. 22 at Pellettown will be replaced with four I-beam spans on concrete piers. Steel is now at the site.

The drain on the Sussex spur has been replaced with cast-iron pipe.

In addition to the above, Bridge 27, an 18-span pile trestle over Papakating creek, should have repairs made to timber guards.

Inside guard rails should be placed on Bridge No. 27 and Paulins Kill span at Hainesburg.

Bridges Nos. 28, 30, 31 and 32 should have masonry pointed.

The part of the above railroad extending from Hainesburg Junction to the Delaware river is single track, laid mostly with 60-pound rails, having 26 inch 4 bolt angle bars. Ties number 2,816 per mile. Ballast is gravel and cinders. Alignment and surface are good. Split point switches with high stands are used. Sidings are derailed where grading down toward main tracks.

Automatic electric signals are being erected east of the Delaware River bridge. Across this bridge new 80-pound rail has been laid, having 32 inch 6 bolt angle bars.

LEHIGH VALLEY RAILROAD.

Main Line.

The main line extends from Jersey City to State line at Phillipsburg, a distance of seventy-six miles; that part from Park View to Jersey City, a distance of nine miles and seven-tenths of a mile, is used for freight purposes only.

The track is in practically the same condition as on last inspection, made September 22d, 1908, with the exception that betterments have been made between Phillipsburg and Park View by replacing five hundred and ninety-five tons of old ninety-pound steel rail with the same amount of new. The low places in track are now being raised with stone ballast, of which twenty thousand yards will be used. Drain tile is being placed in all wet ditches, in cuts that require better drainage. Tie renewals have been made to meet the requirements to keep the track in good condition. With the completion of the work now under way this road will be in first-class condition.

Smash boards have been installed for the protection of the draw-bridge over Newark bay as recommended.

A number of the stations west of South Plainfield have high platforms. All recommendations relating to track have been complied with.

Recommendations.—That shoulder be placed at end of derail in switch west of Bloomsbury station. That, where practicable, high station platforms be lowered and stone screenings substituted. That smash boards at Newark bay draw be painted red.

Bridges.—Bridges on this line are all in good condition, except where ordinary repairs are required. Recommendations of 1908 are in process of being carried out.

Bridge 51A will have new ties this season.

Bridge 50A has had an entire new floor.

Bridge 35 is to have approach spans rebuilt and new floor laid at the same time.

Bridge 29 is to have a new center pier and floor this year.

Bridge 16B has had new floor.

Bridge 31 is to have masonry reinforced.

All through plate girder bridges having ties resting on shelf angles are to be rebuilt this year. No. 33 is having new floor put in at the present time.

Bridges 74A, 61A, 57A, 57, 28 and 26 should have tie renewals made where necessary. 61A should have repairs made to west wing walls. 53A should have repairs made to masonry wings and abutments.

Inside guard rails not having beveled points should have a beveled block placed in front of them, protecting the points.

Inside guard rails with protected points should be laid across bridges 6 and 6B.

Bridge 3C over Central Railroad is being rebuilt.

Bridge 6A is the draw in the Newark bay trestle, and is used jointly with the Pennsylvania Railroad. It is the only draw on the line.

Perth Amboy Branch.

Extends from South Plainfield to Perth Amboy, a distance of nine and six-tenth miles. The track has been well maintained and is practically in the same condition as on last inspection, made September 23d, 1908.

Sufficient tie renewals are now being made to keep it in good condition.

Bridges.—Bridge 26B, noted for extensive repairs, will be thoroughly overhauled, beginning in a few days.

The remaining bridges on this branch are in good condition.

Pittstown Branch.

Extends from Landsdown to Pittstown, a distance of four miles. It is all single track. The conditions are practically the same as on last inspection, made September 22d, 1908. Tie renewals and other work necessary thereto have been done to keep the road in a safe condition for the traffic.

Recommendations.—That the necessary tie renewals be made before October 1st, this year.

Bridges.—There are one through and ten deck plate girder bridges on this branch.

No. 60 should have inside guard rails with beveled blocks at points and have ties repaired.

No. 61 should have repairs made to backwalls.

Musconetcong Branch.

Extends from Musconetcong to Hughesville, a distance of four and two-tenth miles, and is used for freight only. The track is in practically the same condition as on last inspection, made September 22d, 1908.

Sufficient tie renewals have been made to keep the road in a safe condition for the traffic.

No recommendations.

Bridges.—There are five pile and timber trestles on this branch, all in good condition.

Inside guard rails not having beveled points should have beveled wooden blocks placed in front of them, protecting the points.

Clinton Branch.

Extends from Landsdown to Clinton, a distance of two and one-tenth miles. The track is in practically the same condition as on last inspection, excepting that betterments have been made by carrying out the recommendations made last year. Sufficient tie renewals have been made to keep the road in a good condition for the traffic.

Recommendations.—That the necessary tie renewals be made and the track be put in good line and surface before October 1st, this year.

Bridges.—There are four bridges on this branch. No. 57 should have beveled blocks placed at guard rail points. No. 59 needs new guard timbers. Plans are in progress for replacing this bridge with one having a solid concrete floor.

National Docks Branch.

Extends from National Junction to Constable Hook and has branches to the Pennsylvania Railroad at Waldo Junction and to the National Docks.

Sufficient tie renewals and other work pertaining thereto has been done to keep this track in good condition. It is used for freight only.

Bridges.—The bridges north of the Central Railroad yards have been replaced with modern double-track structures with the exception of Bridge No. 2F, which is single track. This line leads to the New Jersey Junction tracks. The connection to Pennsylvania Railroad is to be rebuilt as single track.

There is one small lift bridge over the Morris canal, on a siding of this branch.

Irvington Branch.

This branch extends from West Elizabeth to Irvington, a distance of three miles. It is used for freight purposes only.

It was recommended on last inspection, made on September 23d, 1908, that two thousand ties be placed in track. This recommendation has been complied with. The road is well ballasted with cinders and is in good condition.

Bridges.—The two small I-beam bridges and one concrete culvert on this branch are in good condition.

Flemington Branch.

This branch extends from Flemington Junction to Flemington, a distance of one and eight-tenths miles.

This branch is in practically the same condition as on last inspection. Sufficient tie renewals have been made and other work pertaining thereto done to keep the road in good safe condition for the traffic.

Bridges.—The bridges on this branch are in good condition.

Timber bulkhead around pipe culvert near Flemington has been repaired and is now in good shape.

MORRISTOWN AND ERIE RAILROAD.

This road extends from Essex Fells to Morristown, a distance of ten and eight-tenths miles.

The track has been well maintained and with the exception of two and eight-tenths miles of 62-pound rails, is in good condition; this part is safe for the traffic at a reduced speed. Tie renewals have been made during the past year to meet the requirements. The ditches in several cuts are filled and should be cleaned.

Recommendations.—That the light rails be closely watched and all bolts be kept tight and spikes driven home. That the maximum rate of speed over this rail be thirty-five miles for passenger and eighteen miles per hour for freight trains. That all ditches be cleaned as early as practicable; additional shoulder should be placed on fills where needed; all unsound ties be replaced; that derails be placed on all switches where, if brakes were released, cars would run out on main track.

Bridges.—The bridges on this line are timber trestles of various lengths and two-deck plate girders. The standard trestle across the Troy meadows has 12-foot spans, and those over the Passaic river and Whippany river, in Morristown, have 16-foot and 18-foot spans, respectively.

Repairs are being made to all bridges in accordance with recommendations made in 1908 report. Whippany River bridge, in Morristown, has had repairs made, ties respaced and new guards put on.

First opening on Malapardis Branch east of Junction has been entirely rebuilt. The cattle pass west of Malapardis brook has been filled in.

The Whippany River trestle in the Troy meadows has been filled for about one-third of its length.

Ties are becoming badly bunched on Malapardis bridge, due to lack of proper guard timbers. These should be put on after ties are respaced not over eight inches apart.

Inside guard rails are placed on the longer trestles as follows: Passaic river and the three crossings of Whippany river at Troy Meadows, Whippany and Morristown.

Work of placing guard timbers, well notched over ties to prevent bunching, should be continued till all trestles are so guarded. At the same time ties should be respaced so that there should be not over eight inches clear between them.

NEW JERSEY AND PENNSYLVANIA RAILROAD.

This road runs from Watnong to Whitehouse, a distance of twenty-four miles. The conditions of the rails and roadbed are practically as at time of last inspection made July 21st, 1908. Ties sufficient for maintenance were placed in track last year.

Recommendations.—That the track on approaches to all openings be kept in good line and surface; that derails be placed on all switches where the grade is such that if brakes are released the cars will run out on the main track. That all bolts be tightened and spikes driven home, and the track kept to gauge. The conditions of the rails are such that the rate of speed must not exceed eighteen miles per hour, and not to exceed ten miles per hour over openings twelve feet in length and over.

Bridges.—The bridges on this line are all timber trestles. As noted in report of November 30th, 1908, much work has already been done toward bettering the condition of these bridges, but there still remains considerable to do. The excessively long spans in some of the crossings should be reduced by placing additional bents under them as recommended, or having heavier stringers substituted.

Ties have generally been respaced much closer, and on nearly all bridges light guards have been placed. In some cases these guards do not extend to end of bridge and ties are beginning to bunch. A few wide spaces were noted in which additional ties should be placed. These should receive prompt attention.

Care should be taken to maintain embankment full width up to the ends of all bridges. Where erosion has taken place or is likely to occur, the bank should be riprapped.

The rail is light and crooked across the bridges. Care should be taken to keep it in gauge, well spiked and in the best condition possible. There are no inside guard rails on any bridge.

The repairs which were started last year should be continued until all the old and unsound timber is replaced by that which is sound and of sufficient size to properly carry the load.

Many of the smaller bridges could be maintained more economically and safely if pipe or box culverts were substituted.

Speed of trains over the bridges which are in need of imme-

diate repairs and which contain long spans, should be reduced to the lowest possible limit.

NEW YORK AND LONG BRANCH RAILROAD.

This road extends from Perth Amboy to Bay Head Junction, a distance of thirty-eight and four-tenths miles.

Since last inspection made on October 16th, 1908, betterments have been made by placing four hundred tons of ninety-pound steel rail in main line and four hundred additional tons will be placed in track this fall. Four hundred tons of eighty-pound second have replaced the seventy-pound.

Sufficient tie renewals have been made and other work pertaining thereto has been done to keep the track and roadbed in good condition.

Recommendations.—That the work of changing the locking and rails in Manasquan draw, to conform with those now in use at Little Silver draw, be hurried.

Bridges.—Bridges are in fair to good condition, except as noted below. Some of the repairs recommended in 1908 have been made, others have not. They are as follows:

Flat Creek trestle has been repaired.

North end of Matawan has had some repairs made and is now in fair condition. A further report will be made on this trestle.

Little Silver approach has had repairs made and is now in fair condition.

Belmar bridge over Shark river has had some new caps, piles and wedges, but additional stringers have not been placed under each rail as recommended.

Repairs have been made at Wreck Pond.

Davis creek has not been repaired. It is to be rebuilt this fall.

Briels bridge has been repaired.

Manasquan trestle has had 1,200 feet filled at south end and some timber renewals made.

Renewals have been made in most part with second-hand timber taken from the old Raritan river bridge, which was replaced with a new one last year.

Seven small I-beam spans were noted for further examination and report.

Recommendations.—Point masonry abutments at Field's Underpass.

Make necessary tie renewals at Allenhurst bridge.

Repair north wing of Interlaken bridge.

Place additional stringer under each rail of Shark river bridge.

Rebuild Davis creek trestle.

Clean girder seats where foul with dirt and cinders. Extend guard rails on facing ends at least one rail length beyond bridge, and protect points with blocks sloping from top of rail to ties, and securely spiked to them.

NEW YORK, SUSQUEHANNA AND WESTERN RAILROAD.

The part of this road in New Jersey extends from West End to the State line at Delaware Water Gap, a distance of 96½ miles.

Sufficient tie renewals were made during the past year to meet the requirements. The recommendations made in the last report have been completed, with the exception that there is some shoulder still needed on the fills west of South Ogdensburgh. Nothing has been done with the old station at Sparta Junction, neither has the extra waiting room asked for been added at Beaver Lake.

Recommendations.—That the annual percentage of tie renewals be made before September 1st, this year. Special attention is called to that part of the track between Blairstown and Hainesburg, where nearly double the number is required. Additional shoulder should be placed in the fills where required between Charlottsburgh and Smith Mills and between South Ogdensburgh and Sparta; all trees standing on right of way which in falling would foul main track should be taken down.

Bridges.—Many of the bridges on this line are old structures, designed for somewhat lighter loads than those at present in use, but they are being maintained in good condition.

Trains, unless further restricted in special cases, are limited to a speed of forty-five miles per hour for passenger and twenty miles for freight over the entire line. Loads are also limited between Passaic and Granton Junctions to locomotives weighing

without the tender 103.5 tons, and on the rest of the line to 72.8 tons; in each case followed by a uniform load of 4,700 pounds per foot of track.

Extensive repairs, both to superstructure and substructure, are being made to bridge 96.88 over the Delaware river. The east abutment of bridge 81.31 near Blairstown is being rebuilt. Repairs have been made to bridge 13.95 at Hackensack. The pile trestle forming east approach to Little Ferry draw has been rebuilt.

At West End work is under way for the elimination of the grade crossing of the Lackawanna Railroad.

There are three small deck plate girder draw bridges on this line, over the Hackensack river, Overpeck and Bellman's creeks. The last-named is never opened.

Recommendations.—Bridge 34.86 should have cracked seat stones on west abutment replaced with sound ones. Bridge 81.88 should have west abutment repointed and wing walls repaired. Bridges 90.77 and 59.87 should have sloping blocks placed at both guard rail points.

Middletown Branch.

Extends from Beaver lake to the State line east of Unionville, a distance of twenty miles; fourteen miles of the track on this branch are laid with sixty-pound rail. This is surface-bent, and worn bolts also make it impossible to keep it in good line. This part of the road is only in fair condition. Tie renewals have not been made as far as the conditions require.

Recommendations.—That the necessary tie renewals be made before September 1st, this year. Special attention is called to that part of the track on the curve between Hamburg and Lime Kiln switch. This part should be looked after as early as possible, and all spikes be driven home. Where the Goldie Tie Plates have recently been placed under rails this should be done every day until the plates are settled.

Clean ditch in cut west of Sussex, additional shoulder should be placed on fill west of bridge 67.67. All trees standing on right of way which in falling would foul main track should be taken down.

Bridges.—The bridges on this branch are all maintained in good condition for the traffic. Speed of passenger trains is limited to forty-five miles per hour and freight trains to twenty miles per hour. Loads are restricted to 72.8-ton locomotives followed by 4,700 pounds per foot of track.

Bridge 65.93 over the L. and N. E. R. R. still has temporary bent under it, maintained in safe condition. Bridge 66.13 east of Sussex has had repairs completed and tie renewals made where necessary.

Delaware Branch.

A single-track line extending from Warrington Junction along the east bank of the Delaware river to Delaware, one and three-quarters miles.

This road is in fair surface and alignment, laid with 75-pound rails, having 26-inch 4-bolt angle bars. Ties 2816 to the mile, are in fair condition; renewals are made in sufficient quantity.

Curves are sharp and grades are heavy, especially at the lower end. Power and traffic are very light and trains are operated at low speed. But two passenger trains, in each direction, pass over this branch daily.

Ballast is cinders, in places used quite sparingly. Many of the track bolts are loose and should be tightened. There are two small bridges on this line, one of which is a small cattle pass with timber stringers, and the other a deck I-beam structure of 14-feet clear span with masonry abutments, both of which are in good condition.

Except for loose bolts in rail joints, the ordinary repairs made by the railroad company maintain this branch in sufficiently good condition for the traffic.

Lodi Branch.

Extends from Hackensack Junction to Lodi, a distance of two miles. The track has been improved since last inspection by replacing all the light sixty-pound rail with second seventy. Ballast has been placed under track in good quantity.

Recommendations made in 1908 have been complied with. The road is now in good condition.

Recommendations.—That all bolts be tightened, spikes driven home and tie renewals made where required.

PASSAIC AND NEW YORK RAILROAD.

This road extends from Passaic Junction to Passaic, a distance of three and one-half miles. It is used for switching purposes only. The rails and roadbed are practically in the same condition as on last inspection. Sufficient tie renewals have been made and other work pertaining thereto has been done to keep the road in a safe condition for the traffic.

Bridges.—There is one bridge on the main line over the Passaic river, which is in fair condition and safe for the traffic. The one at Passaic is used for the interchange of cars between this road and the Erie, and was recommended to be rebuilt in 1907. This has been done. The bridge over the canal to the Bottany mill is in poor condition and needs repairs.

Recommendations.—That three hundred ties be placed in main line; that all unsound piles, stringers, caps, ties and guard rails in the bridge to the Bottany mill be replaced as early as practicable.

Edgewater Branch.

This branch extends from Little Ferry Junction to Edgewater, a distance of three miles.

It is double track, laid with a seventy-pound rail, which is getting quite badly worn, especially on the curves. It is safe for the traffic. Tie renewals are now being made and should be continued until all ties unfit for service are replaced. This branch is used for freight purposes only.

Bridges.—There are four steel bridges on this branch, all in good condition and safe for the traffic with the exception of the drawbridge, which needs some repairs to the floor.

Recommendations.—That the tie renewals be continued until all of those unfit for service are replaced. That outside guard timbers and tie renewals be made on the drawbridge where required.

PEMBERTON AND HIGHTSTOWN RAILROAD.
UNION TRANSPORTATION COMPANY, LESSEE.

Road extends from Hightstown to Pemberton, a distance of twenty-five miles. The track and roadbed are practically in the same condition as on last inspection. Derails have not been placed in all sidings where required, as recommended. Sufficient tie renewals have been made and other work done to keep the road in fair condition and safe for the present traffic, at the rate of speed under which trains are operated.

Recommendations.—That a high switch stand replace the ground lever at Sharon Gravel switch and the large tree standing on right of way opposite be taken down. That either a derail or a guide rail that will throw cars, if derailed, away from main track, be placed at Hornerstown and Wrightstown coal switch; that tie renewals be made for the whole line to conform with the several parts now complete.

Bridges.—The company has listed the following bridges for repairs this year and it is understood that material is ordered for the same.

No. 1. 10 ties, 2 stringers and guards.

No. 3. 2 caps and guards.

No. 2. 2 stringers.

No. 4. 1 cap.

No. 5. New deck.

No. 7. 1 stringer.

No. 8. 3 caps, 6 stringers, 3 sills.

No. 11. 1 cap.

No. 15. 2 stringers.

No. 16. 1 cap.

If these are put in place this season the bridges will have had all the necessary repairs made.

Bridges Nos. 5 and 8 were noted in 1907, on account of their height, for longitudinal bracing, being about twenty and thirty feet high, respectively. Objection was made to this bracing on account of the possibility of obstructing the flow of water, which at times of flood is claimed rises quite high at these places. Such bracing may with safety be omitted on the lower of these, No. 5,

which is located at a station at which all trains stop, and as the bents are composed of piles, transversely braced.

At No. 8, the higher one, composed of 12 x 12 timber bents on piles, it appears as though two lines of horizontal bracing, at least 4 x 10 inches in size and extending full length between banks, could, with advantage, be bolted to the vertical posts at a height sufficient to clear flood water and longitudinal diagonal bracing be placed between at least two bays, say the second either side of the central bent and above said horizontal line of bracing. This, with transverse diagonal bracings on the highest bents, should materially add to the stiffness and safety of this bridge. This bridge has inside guard rails, terminating in frog points slightly beveled off.

Respacing of ties is being done as tie and guard renewals are made. Other recommendations of 1907, bridges Nos. 2, 11 and 13, have been carried out, except for inside guard rails. Bridge No. 11 has been extended one bay at each end to provide for washing of banks. It is promised to repair bulkheads on first cattle pass south of Wrightstown this year.

Recommendations.—Make repairs to bridges and brace bridge No. 8 as outlined above. Place inside guard rails on the following bridges:

1, 2, 3, 4, 5, 7, 11, 13, 15, 17 and 18, to extend one rail length beyond bridge at each end and have their ends protected by a beveled block, sloping from top of rail to ties and securely spiked down.

Place similar blocks, protecting frog points of guard rails, on bridge No. 8.

PENNSYLVANIA RAILROAD.

Main Line—New York Division.

The portion of the New York Division in New Jersey extends from Jersey City to Trenton, a distance of fifty-six and seven-tenths miles.

The track and roadbed are practically in the same condition as on last inspection, made October 12th, 1908.

Tie renewals have been made and other work pertaining thereto, to keep the track and roadbed in first-class condition, has been done.

Recommendations.—That smash boards be painted red.

Bridges.—Bridge No. 16 over Rahway river has had repairs made as recommended. The bents under the center of each span have been repaired and the bridge is safe for the traffic.

Bridge 22 over the Lehigh Valley Railroad at Metuchen has had new floor and masonry pointed. It is in good condition.

Bridge 43 over the Trenton Water Power has not had renewals made as recommended. The ties are in fair condition. Tie plates are on them, which will prolong their service. The wooden guards are poor and should have the necessary renewals made.

Some of the bridges have inside guard rails with iron points that are neither beveled off nor protected by sloping wooden blocks. Beveled blocks should be placed at all such places.

Recommendations.—Renew guards on bridge 43 where necessary. Protect all inside guard rail points, which are not beveled off, by wooden blocks sloping from top of rail to ties and spiked to them.

Perth Amboy and Woodbridge Branch.

Extends from Woodbridge Junction to Perth Amboy Junction, a distance of six and eight-tenths miles.

The track and roadbed are practically in the same condition as on last inspection.

Sufficient tie renewals have been made and other work done to keep the track and roadbed in good condition.

Recommendations.—That all trees standing on right of way which, in falling, would foul main track, be taken down. Particular attention directed to those standing on embankment near overhead bridge south of Rahway.

Bridges.—Inside guard rails have been placed on the three bridges on this branch, as recommended in 1908. The bridges are now in good condition.

Recommendations.—Place a beveled block in front of guard-rail points, sloping downward from top of rail to ties and securely spiked down.

Millstone Branch.

This branch extends from Millstone Junction to East Millstone, a distance of six and three-tenths miles. The track is in practically the same condition as on last inspection made October 12th, 1908.

A number of unsound ties were noticed west of Clyde. Renewals are now being made east of there, and these should be continued on the same percentage through to East Millstone. Additional cinder ballast is being placed under track. The ditches in cut west of Voorhees and in cut east of East Millstone should be cleaned. The maximum speed is thirty miles per hour. The track is in safe condition for the traffic.

There are no bridges on this line.

Recommendations.—That the ditches in the first cut west of Voorhees and the first cut east of East Millstone be cleaned. That the same percentage of tie renewals now being made east of Clyde be continued to East Millstone. Work should be done before November 1st, this year.

Rocky Hill Branch.

Extends from Monmouth Junction to Rocky Hill, a distance of six and three-tenths miles.

The track and roadbed are in practically the same condition as on last inspection.

Sufficient tie renewals have been made in the past year and are being made for the present year, to keep the track in good condition for the traffic.

Bridges.—There are three small trestles on this branch, all in good condition. Two of them will be replaced with cast-iron pipe this fall. The pipe is now on the ground.

Princeton Branch.

Extends from Princeton Junction to Princeton, a distance of three and one-tenth miles.

The track and roadbed are in practically the same condition as on last inspection.

Sufficient tie renewals have been made and other work has been done to keep the track in good condition.

Bridges.—The bridges on this branch are all in good condition. There is one drawbridge over the Delaware and Raritan canal.

Delaware River Bridge Branch.

Extends from the Delaware river to Haddonfield Junction, connecting with the Atlantic Division of the West Jersey and Seashore Railroad, a distance of seven and eight-tenths miles.

The track and roadbed are practically in the same condition as on last inspection.

Sufficient tie renewals have been made and other work done to keep the track and roadbed in good condition.

Bridges.—Bridges are in good condition, the recommendations of 1908 having all been carried out. There is one draw span over the channel of the Delaware river.

Recommendations.—Place inside guard rails on the viaduct approach to the Delaware River bridge on the north track, east of the cross-over. Protect unguarded points of all such inside guard rails by a beveled block sloping from top of rail to ties and securely spiked down.

Belvidere Division—Main Line.

This division extends from Trenton to Manunka Chunk, a distance of sixty-seven and nine-tenths miles.

Since last inspection betterments have been made by replacing the old seventy-pound rail with four hundred and fifty tons of new eighty-pound rail. Five hundred and fifty tons, in addition, will be placed in track this year, making a total of one thousand tons. Stone ballast to the amount of two thousand yards will be placed in track before the end of the year. Three lap sidings have been built between Phillipsburg and Belvidere to better facilitate the movements of trains between these points. Tie renewals have been made and other work pertaining thereto has been done to keep the track in good condition.

Recommendations.—That smash boards be painted red. That all trees standing on or overhanging right of way which, in fall-

ing, would foul main track, be taken down. That all trains come to a stop before crossing the tracks at the semaphore signals governing the movement over the crossing at the east end of the Lehigh and Hudson Railroad bridge, at Phillipsburg.

Bridges.—The recommendations made last year have been, in part, carried out. The following have received attention:

New ties have been placed on bridge 76. A new span is in process of construction for this place.

Guard timbers have been placed on bridge 90.

Inside guard rails have been placed around curve in Belvidere between bridge 93 and 94, and bridge 94 has been replaced with a new through plate-girder span. A new bridge has been ordered for 59.

The remaining recommendations have not been carried out, and they are therefore repeated:

Bridges 16, 69 and 87 should have masonry repointed.

Bridge 37 should have repairs made to wing walls.

Bridge 58 should have north abutment rebuilt. It is now shored. Apparently the condition of these bridges has not changed since last inspection, but the work recommended should be done before they get any worse.

Inside guard rails were recommended on all bridges over thirty feet long. The following bridges should have them put on: 3, 16, 21 on passing siding, 23, 68, except at coal dump, and 90. They should have points protected by being beveled off or have sloping blocks placed in front of them.

The following bridges should have beveled blocks placed in front of guard rail points protecting them: 1, 2, 4, 7, 9, 11, 15, 26, 49, 54, 55, 58, 59, 63, 66, 93 and 94.

Flemington Branch.

Extends from Lambertville to Flemington, a distance of twelve miles. The track is in practically the same condition as on last inspection. The sixty-pound rail is getting quite badly worn; one mile of it is now being replaced with second, seventy. Sufficient tie renewals are being made to keep the road in a safe condition for the traffic.

Recommendations.—That additional shoulder be placed in the two fills just south of Mount Airy; that all decayed ties be replaced with sound ones at the approaches to the first bridge south of Mount Airy (this to be done within the next two weeks); that all trees standing on or overhanging right of way which in falling would foul main track be taken down.

Bridges.—Bridge No. 3 over a private road or farm crossing, at present closed to traffic, is in very poor condition. It is temporarily shored up, making traffic safe for the railroad, but it is time it was rebuilt or filled in. Bridges Nos. 10, 17 and 22 should have masonry pointed, and No. 6 should have repairs made to south wing wall.

In addition to the above, Bridge No. 20 should have the lower courses of masonry repointed and ties renewed. Inside guard rails with beveled points, or having points protected by beveled blocks, should be placed on all bridges over thirty feet in length on this branch. Their numbers follow: 1, 2, 5, 6, 11, 12, 18, 20 and 23.

Amboy Division—Main Line.

The main line extends from Camden to South Amboy, a distance of sixty and eight-tenths miles. Sufficient tie renewals have not been made to meet the requirements for the traffic between Camden and Bordentown.

The line and surface are good, and the track is in good to fair condition.

All track recommendations made in 1908 have been complied with, with the exception of rebuilding retaining wall east of Bordentown.

Recommendations.—That tie renewals for the year 1909 be not less than ten per cent. for each mile of main track between Camden and Bordentown, and renewals sufficient for the traffic between Bordentown and South Amboy. That high stands or distant signals be placed in connection with all switches where trains run against the points. That all trees standing on right of way or branches overhanging track be taken down, particularly those on top of cut between South Amboy and Old Bridge. That

the timbers holding up the retaining wall east of Bordentown be kept in good condition. This wall should be rebuilt, as a derailment would knock out the supports and let wall cover main track.

Bridges.—Bridges are all in good condition, former recommendations having been carried out.

Bridges 25, 26 and 27 are now in good condition. Bridge 30 has been replaced by two forty-eight-inch pipes and filled in. Bridge 35 has good bents along side of old ones, reinforcing same and making it safe. Bridge 37 has had masonry repointed.

Inside guard rails are now placed on all bridges over thirty feet in length, except those noted in the recommendations which follow.

There are two drawbridges, No. 1 at Cooper's Creek and No. 10 at Delanco.

Recommendations.—Place inside guard rails on the following bridges: 8, 10½, 20, 29 on eastbound track, 28, and on Camden bridges where at present omitted.

All guard rail points to be protected by a beveled block, sloping from top of rail to ties, and securely spiked down.

Bridge 38 should have girder brought to bearing on new bents.

Burlington Branch.

Extends from East Burlington to Mount Holly, a distance of seven and two-tenths miles.

There are but four trains passing over this branch each day. It has been maintained in a sufficient manner to keep it safe for the traffic.

The track recommendations of 1908 have been complied with.

Bridges.—Bridge No. 2 has had sufficient timber renewals made. Stringers have been examined, and while showing some sap rot on top, are sound elsewhere and capable of safely carrying the traffic.

The four bridges on this branch are otherwise in good condition. Inside guard rails have not been placed on all bridges over thirty feet long, as previously recommended. No. 2 contains a draw span which has not been used as such for many years.

Recommendations.—Place inside guard rails on bridges 1 and 3. Protect guard rail points by a beveled block, sloping from top of rail to ties and securely spiked down.

Kinkora Branch.

Extends from Kinkora to Lewistown, a distance of ten and seven-tenths miles.

The track is in practically the same condition as on last inspection, made October 14th, 1908. It is in fair condition and sufficient for the light traffic. Tie renewals have been made to meet the requirements.

Recommendations.—That trains will not be allowed to run in excess of schedule time over the three miles of sixty-pound rail. That the openings between ties be filled in where needed. That brush be cut on right of way at Gay's crossing, to give a better view for vehicles and pedestrians at that point. That all trees standing on right of way, which in falling would foul main track, be taken down. That tie plates be placed on nine degree curves and over.

Bridges.—The seven bridges on this branch are all in fair to good condition. Inside guard rails are on Bridge No. 1, seventy-three feet long. Nos. 2, 5 and 7 are between thirty and forty feet in length.

Recommendations.—Place inside guard rails on bridges 2, 5 and 7. Protect guard rail points by a beveled block, sloping from top of rail to ties, and securely spiked down.

Bordentown Branch.

Extends from Bordentown to Trenton, a distance of six and two-tenths miles.

New eighty-four pound rail has been laid around the sharp curve at Bordentown, and is also being placed in some of the curves between Bordentown and Trenton. The track conditions are the same as between Camden and Bordentown. It is an important branch and should be kept in first-class condition.

Recommendations.—That not less than ten per cent. tie renewals be made for the year 1909. That trees be taken down that are standing on right of way just east of Bordentown.

Bridges.—Guard rails lie alongside of bridge No. 3 and will be placed here shortly. Bridges are all in good condition.

Recommendations.—Place inside guard rails on bridge No. 1. Protect guard rail points by a beveled block, sloping from top of rail to ties and securely spiked down.

Jamesburg Branch.

Extends from Monmouth Junction to Jamesburg Junction, a distance of five and six-tenths miles. The track conditions are practically the same as on last inspection. Tie renewals have been made and other work pertaining thereto done, to keep the track in good condition.

Recommendations.—That not less than ten per cent. tie renewals be made to each mile of track this year.

Bridges.—There is one bridge on this branch. It is in good condition.

Recommendations.—Protect guard rail points by a beveled block sloping from top of rail to ties and securely spiked down.

Freehold and Jamesburg Branch.

Extends from Jamesburg Junction to Sea Girt, a distance of twenty-seven and five-tenths miles.

Betterments have been made on this branch by placing one hundred and twenty-five tons of new eighty-five pound steel rail in main track. One hundred and fifteen tons more will be put in this year, making a total of two hundred and forty tons. Other than this the conditions are practically the same as on last inspection, made October 14th, 1908.

Sufficient tie renewals have been made, and other work pertaining thereto has been done to keep the track in first-class condition.

Bridges.—Part of material for renewing bridge No. 3 is on ground for making repairs noted here in 1908. Inside guard rails have been placed on bridges 17 and 18. Bridges otherwise are in fair condition.

Recommendations.—Protect guard-rail points by beveled block sloping from top of rail to ties and securely spiked down.

Camden and Burlington County Branch.

Extends from Pavonia to Pemberton, a distance of twenty-two and five-tenths miles.

The track has been maintained in fair condition.

Track recommendations made in 1908 have been complied with.

Recommendations.—That high stands or distant signals be placed in connection with all main track switches where trains run against the points. That all unsound ties be renewed this year. That smash boards at Hainesport draw be painted red.

Bridges.—Bridge No. 10, thirty-six feet long, has not had inside guard rails placed on it as recommended in 1908. The remaining bridges are all maintained in good condition. There is one drawbridge, No. 6, at Hainesport.

Recommendations.—Place inside guard rails on bridge No. 10. Also place inside guard rails on bridges Nos. 4 and 5. Protect guard-rail points by a beveled block, sloping from top of rail to ties and securely spiked down.

Medford Branch.

Extends from Mount Holly to Medford, a distance of six and six-tenths miles. Sufficient tie renewals have been made and other work pertaining thereto has been done to keep the track in a sufficient condition for the traffic.

Track recommendations made in 1908 have been complied with.

Bridges.—Bridge No. 6 in former reports should have read No. 5. This bridge, No. 5, has had the repairs made as recommended. Inside guard rails have not been placed on any of the four bridges on this branch as recommended. Otherwise the bridges are in fair to good condition.

Recommendations.—Place inside guard rails on bridges 2, 3, 5 and 6. Protect guard rail points by a beveled block, sloping from top of rail to ties and securely spiked down.

Vincentown Branch.

Extends from Evansville to Vincentown, a distance of two and eight-tenths miles. The track and roadbed are in practically the same condition as on last inspection, made October 15th, 1908. It is in fair condition only, but safe for the light traffic.

Recommendations.—That trains be not allowed to exceed schedule time. That warning signs be placed at first crossing west of Evansville.

Bridges.—There are no bridges on this branch.

Browns Mills Branch.

Extends from Browns Mills Junction to Browns Mills, a distance of one and eight-tenths miles.

Recommendations.—That tie renewals be made in sufficient numbers to keep the track in a safe condition. That the embankment be widened to a width of not less than six feet, nor less than fifty feet in length, even with the ties, at the end of derail at Browns Mills Junction.

Bridges.—There are no bridges on this branch.

PHILADELPHIA AND LONG BRANCH RAILROAD.

Extends from Bay Head Junction to Birmingham, a distance of forty-six and one tenth miles. The track and roadbed are in practically the same condition as on last inspection, made October 15th, 1908. Tie renewals have been made and other work pertaining thereto has been done to keep the road in good condition.

Recommendations.—That smash boards be painted red. That high stand or distant signals be connected with all main track switches where trains run against the points.

Bridges.—Recommendations for inside guard rails have not all been carried out. They have been placed on bridge No. 24, but not on bridges Nos. 5, 17, 18 and 23. Bridge No. 8 was rebuilt last year. The remaining bridges on this line are in good condition. Bridge 13, across Barnegat bay, contains the only draw on this branch.

Recommendations.—Place inside guard rails on bridge 5, 17, 18 and 23 as recommended last year. Also place inside guard rails on bridges 10 and 14. Protect all guard-rail points by a beveled block, sloping from top of rail to ties and securely spiked down.

Island Heights Branch.

Extends from Island Heights Junction to Island Heights, a distance of one mile. It has been maintained in a safe condition for the traffic.

Recommendations.—That smash boards be painted red.

Bridges.—There is but one bridge on this branch, a trestle, 1,806 feet long, across Tom's river, containing a draw span. Recommendation that inside guard rails be extended across full length of trestle has not been carried out.

Recommendations.—Extend inside guard rails entirely across trestle. Respace ties where beginning to bunch east of draw and at Island Heights station. Protect guard-rail points by a beveled block, sloping from top of rail to ties and securely spiked down.

PHILADELPHIA AND BEACH HAVEN RAILROAD.

This road is operated by the Tuckerton Railroad, as agent for the Pennsylvania Railroad. It extends from Manahawkin to Beach Haven, a distance of twelve miles. The track conditions are practically the same as on last inspection, made October 14th, 1908. Sufficient tie renewals have been made to keep the road in safe condition for the traffic. On account of the tide, when high, washing over the lower end of the road, it is hard to keep it in surface.

Drawbridge No. 6 has been protected by smash boards in accordance with the recommendations made by your Board.

Recommendations.—That the rate of speed shall not exceed forty miles per hour. That smash boards be painted red.

Bridges.—Recommendations made last year have not been carried out, and the bridges between Manahawkin and Barnegat City Junction are getting in poor condition. They should all be thoroughly overhauled and good timber substituted for the poor

material which they contain. Inside guard rails, with sloping blocks protecting their points, should be placed on all these bridges. On bridge No. 6 the guard rails should be extended the full length of the approach trestles.

Speed of trains should not exceed twenty miles per hour across these bridges.

Bridge No. 6, across Manahawkin bay, contains a half through timber Howe truss draw span, and speed is here restricted to ten miles per hour. This is the only drawbridge on the line.

The bridges south of Barnegat City Junction are all in fair condition. No. 8 should be filled. No. 10 should have stringers repaired. Inside guard rails, as noted above, should be placed on all bridges over thirty feet long.

PHILADELPHIA AND READING RAILROAD.

Extends from the Delaware river to Bound Brook, a distance of twenty-one miles.

The track and roadbed are in practically the same condition as on last inspection. Sufficient tie renewals have been made and other work done to keep the track and roadbed in first-class condition.

Recommendations.—That the trees standing on right of way, westbound track, a short distance east of Belle Mead, be taken down.

Bridges.—Guard rails with beveled or protected points are placed on all bridges as recommended. Timber renewals have been made where recommended in 1908, except on bridge No. 62, which is to receive attention shortly.

Bridges are otherwise in good condition.

Recommendations.—Make necessary tie and guard timber renewals on bridges Nos. 39 and 62.

Port Reading Branch.

Extends from Port Reading Junction to Port Reading, a distance of twenty-one miles.

The track and roadbed have been much improved by laying additional ballast and surfacing since last inspection.

Sufficient tie renewals have been made and other work done to keep the road in good condition.

Bridges.—Much work has been done since last inspection to put the bridges on this branch in the good condition in which they are now.

Guard rails with beveled or protected points are on all except one end of bridge No. 20. Recommendations for tie and guard timber renewals have all been carried out except guard timber on bridge No. 22. These two places are to be attended to in the near future.

Recommendations.—Place beveled block in front of unprotected guard rail point on bridge No. 20, and renew guard timber on bridge No. 22.

Trenton Branch.

Extends from Trenton to Trenton Junction, a distance of three and seven-tenths miles.

The track and roadbed are in practically the same condition as on last inspection. Sufficient tie renewals have been made and other work done to keep this branch in good condition.

Bridges.—There are no bridges on this branch.

RAHWAY VALLEY RAILROAD.

This road extends from Aldene to Summit, a distance of eight miles.

There are a good many unsound ties east of Kenilworth. With the work done as recommended this road will be in good condition.

Recommendations.—That all unsound ties be replaced, track be put in surface and line east and west of Springfield. Additional shoulder be placed on fill east of Summit, and track put in line. That the ditches in all cuts be cleaned; that derails be placed on all switches where if brakes were released cars would run out on main track.

Bridges.—The work of renewing the culverts at Valley Junction as recommended has been begun and, it is stated, will be con-

tinued till all unsound timber is replaced with good material. Bridges and trestles are in good condition. Across the Morris avenue bridge and trestle in Summit, both of which are on curve, and the Rahway river bridge and trestle inside guard rails should be placed; the ends of such guard rails should be brought together to a point well beyond the ends of the bridge and such points protected by a beveled block spiked to ties.

RARITAN RIVER RAILROAD.

The conditions are practically the same as shown in inspection made in 1908. The ditches have been cleaned as recommended. Three thousand ties are on the ground, which will be placed in the track this year. This number will be sufficient to meet all the requirements. The track has been well maintained, and is in very good condition and sufficient for the traffic.

Smash board, interlocked with draw, has been placed on the main line South River drawbridge, also a semaphore signal at west end of bridge to protect the sidings. This completes the recommendation for drawbridge protection on this line.

Bridges.—Recommendations made in 1908 report and reports of subsequent inspections have been complied with, or are in process of being carried out.

Camden and Amboy bridge is being replaced by a through plate girder structure having complete floor system. The new bridge is in two spans, resting on the old masonry. The eastern span was set on April 25th, and the western one is assembled complete on cars ready for setting on May 2d. The old material taken from this location will be remodeled and used at Crossmans.

It is intended to replace the wooden trestle approach to east end of South River bridge by a series of deck plate girder spans on concrete piers.

Also at Milltown bridge the old sixty-foot girder in center, with its two short flanking timber trestles, is to be replaced by two plate girder spans similar to the new work already finished.

All new bridges are designed for Cooper's "E-55" loading. When these renewals are completed the bridges on this line will be in good condition for heavy traffic.

TUCKERTON RAILROAD.

Extends from Whittings to Tuckerton, a distance of twenty-nine miles. It is in practically the same condition as on last inspection.

Sufficient tie renewals have been made to meet the requirements. The road is in good safe condition for the traffic.

Bridges.—These bridges are all small pile trestles, and are in good condition. The bridge at West Creek station might be replaced with iron pipe. Guard rails are placed on the longer spans and their points are protected with blocks.

As future tie renewals are made on the bridges it is recommended that they be spaced six inches apart in the clear.

WEST JERSEY AND SEASHORE RAILROAD.

Atlantic City Division—Main Line.

Extends from Camden to Atlantic City, a distance of fifty-eight and nine-tenths miles.

Sufficient tie renewals have been made and all other work has been done to keep the track and roadbed in a strictly first-class condition.

Recommendations.—That smash boards be painted red.

Bridges.—The bridges are all in good condition.

Medford Branch.

Extends from Haddonfield to Medford, a distance of eleven and seven tenth miles.

The track and roadbed are in practically the same condition as on last inspection, made October 20th, 1908. Sufficient tie renewals have been made and other work done to keep the track in fair to good condition and safe for the traffic.

Recommendations.—That high switch stands be placed at all facing-point switches excepting where they are connected with interlocking tower or distant switch signals.

Bridges.—The small bridge between Marlton and Elmwood road has had new guard timber as recommended. Guard rails

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with wooden blocks protecting their points are on all bridges as recommended.

Bridges are all in good condition.

Electric Line—Camden to Millville, to Cape May.

Extends from Camden to Cape May, a distance of eighty-one and nine-tenths miles. Third rail, Camden to Newfield, overhead trolley, Newfield to Millville, steam, Millville to Cape May. Local passenger and freight trains also use the Electric Line.

Sufficient tie renewals have been made and all other work done to keep this road in first-class condition.

Recommendations.—That high switch stands be placed at all facing-point switches on this division and all branches, excepting where they are connected with interlocking towers or distant switch signals.

Bridges.—All bridges on this line are in good condition.

Newfield Branch.

This branch is third rail and extends from Newfield to Atlantic City, a distance of thirty-four and three-tenths miles.

Since last inspection, made October 21st, 1908, betterments have been made by placing twelve thousand yards of cinder ballast under track. Sufficient tie renewals have been made and all other work done to keep this road in first-class condition.

Recommendations.—That smash boards be painted red.

Bridges.—Work of rebuilding bridge No. 61 is now under way. When completed it will have new stringers and ties properly spaced, thus carrying out the recommendations of 1908. Other bridges are all in good condition.

There is one drawbridge, over Beach Thoroughfare, Atlantic City.

Penns Grove Branch.

Extends from Woodbury to Penns Grove, a distance of twenty and three-tenths miles.

Betterments have been made during the past year by placing two thousand yards of cinder ballast under the track; other than

this the track and roadbed are in practically the same condition as on last inspection, made October 21st, 1908.

Sufficient tie renewals have been made and other work pertaining thereto done to keep the track and roadbed in fair condition and sufficient for the traffic. Smash boards have been installed at Paulsboro, Bridgeport and Jumbo draws, as recommended.

Bridges.—Bridges are all in good condition. Recommendations made in 1907 have all been properly carried out. All bridges over thirty feet long have inside guard rails with protected points. Bridge 203, White Sluice, has been rebuilt. Bridge 208, Birch creek, has had new guards and extensive timber renewals made. There are three drawbridges, No. 201, Mantua creek; 207, Racoon creek, and 209, Oldman's creek.

Salem Branch.

Extends from Woodbury to Salem, a distance of twenty-eight and seven-tenths miles.

Since last inspection, made October 21st, 1908, betterments have been made by replacing five miles of sixty-pound rail with new eighty-pound. Three miles more are to be placed in track this year, and five thousand yards of cinder ballast placed under track. Other than this the rails and roadbed are practically in the same condition as on last inspection. Sufficient tie renewals made and other work pertaining thereto done to keep the road in a condition fully sufficient for the traffic.

Bridges.—Bridges are all in good condition. No. 218, Mantua creek, had timber approach spans renewed last year. No. 22, Oldman's creek, has had new guard timbers. Bridge 24, Woodstown pond, has had timber renewals made as recommended. Bridge 28, Fenwick creek, has had new ties and caps where necessary. Inside guard rails with points protected by wooden blocks are on all bridges as recommended.

Quinton Branch.

Extends from Alloway Junction to Quinton, a distance of four and one-tenth miles.

The track and roadbed are practically in the same condition as on last inspection, made October 21st, 1908, with the exception that one thousand yards of cinder ballast have been placed under track. Sufficient tie renewals have been made and other work done to keep the track in a safe condition for the traffic.

Bridges.—Inside guard rails with protected points are on both of the trestles on this branch. These bridges are maintained in good condition.

Elmer Branch.

Extends from Riddleton Junction to Elmer, a distance of ten and three-tenths miles. This branch is in practically the same condition as on last inspection, made October 21st, 1908.

Sufficient tie renewals have been made and other work done to keep the track in a safe condition.

Bridges.—The one bridge on this branch, No. 30½, one mile north of Daretown, noted for repairs in 1907 and rebuilding in 1908, has had old wooden stringers replaced by steel I-beams and deck is now in good condition. This bridge is safely carried temporarily on wood bents while negotiations are under way for its rebuilding. Inside guard rails with protected points are in place. The walls are in poor condition.

Recommendations.—Rebuild abutments of bridge No. 30½.

Bridgeton Branch.

Extends from Glassboro to Bridgeton, a distance of twenty and seven-tenths miles.

Betterments have been made by placing two thousand yards of cinder ballast under track; other than this the rails and roadbed are in practically the same condition as on last inspection, made October 20th, 1908. Sufficient tie renewals have been made and other work done to keep this road in good condition.

Bridges.—Bridge 28 has inside guard rails with points protected by sloping blocks as recommended. Bridge 32 is to be rebuilt this year. All other bridges are in good condition and have inside guard rails as recommended.

Wildwood Branch (Formerly Anglesea Branch).

Extends from Wildwood Junction to Wildwood Crest, a distance of seven and nine-tenths miles.

Sufficient tie renewals have been made and all other work has been done to keep the road in good condition. Smash boards have been installed at Grassy Sound draw as recommended.

Recommendations.—That smash boards be painted red.

Bridges.—All bridges are in good condition. No. 56 Grassy Sound contains the only drawbridge on the branch.

Ocean City Branch.

Extends from Sea Isle Junction to Ocean City, a distance of sixteen and two-tenths miles.

Since last inspection, made October 22d, 1908, betterments have been made by placing six thousand yards of cinder ballast under track; other than this the rails and roadbed are in practically the same condition as on last inspection, which is from fair to good and safe for the traffic.

Smash boards were recommended for Ludlam's and Corson's Inlet draws; nothing has been done as yet.

Recommendations.—That the work of installing smash boards be hurried; that the six mile order over these draws be strictly enforced.

Bridges.—The bridges are all in good condition.

*Stone Harbor Branch.
(Formerly known as Avalon Branch.)*

Extends from Sea Isle City to Stone Harbor, a distance of eight miles.

Since last inspection, made October 22d, 1908, betterments have been made by placing three thousand yards of gravel and one thousand yards of cinder under track. Sufficient tie renewals have been made and other work done to meet the requirements. Other than this the track and roadbed are practically in the same condition as on last inspection, which is fair and safe for the traffic.

The work of installing smash boards, as recommended, is under way. Recommendations made on last inspection have been complied with.

Bridges.—There is but one bridge, at Townsend's Inlet, 3,927 feet long. It contains two draw spans, only one of which is in service. Repairs are constantly being made here to keep the bridge in good condition.

Maurice River Branch.

Extends from Manumuskin Junction to Maurice river, a distance of nine and six-tenths miles.

Sufficient tie renewals have been made and all other work done to keep the road in good condition.

Bridges.—Guard rail points have been properly protected by blocks as recommended. The bridges are in good condition.

WEST SHORE RAILROAD.

The portion of this road in New Jersey extends from Weehawken to Tappan, a distance of nineteen miles.

This road is in better condition than on last inspection, made October 9th, 1908. Two miles of new eighty-pound steel rail have been laid; a great deal of stone ballast has been distributed and track raised in the low places. The roadbed and ties are in first-class condition, renewals being made to meet the requirements. It is stated that a new station will be built at West Norwood this year, to replace the old one.

Bridges.—There are six plate-girder bridges on this line in New Jersey and several re-inforced concrete cattle passes. The largest bridge is across Overpeck creek, at Little Ferry. It contains a through-plate girder draw span with pile trestle approaches. There is a small draw span, never opened, over Bellman's creek.

All bridges are maintained in first-class condition.

NEW JERSEY JUNCTION RAILROAD.

Road extends from Weehawken to Jersey City, a distance of four miles. This road is in much better condition than on last

inspection, made October 9th, 1908. The replacing of the sixty-seven-pound rails with eighty-pound has been completed and a great deal of ballast has been placed in track which has raised it out of the mud and helped the drainage. The road is now in good condition.

Bridges.—The two bridges on this line are maintained in safe condition. The bridge over the Erie Railroad has had repairs made to girders and columns. Pending completion of repairs at this point, speed limit of trains is six miles per hour.

WHARTON AND NORTHERN RAILROAD.

This road extends from Wharton to Greenpond Junction; from Oreland Junction to Oreland, and from Wharton Junction to a connection with the New Jersey Central Railroad, a total distance of twenty-four miles.

Thirty tons of new steel rails have been laid within the last year. There are a great many badly worn and bent rails which should be replaced. The ballast conditions are improved; a lot of stone ballast has been placed in track since last inspection. Three new stations have been built during the past year. The service is light, eight trains running over the line each day.

Recommendations.—That three hundred ties to the mile, on the average, be placed in track between Greenpond Junction and Wharton, that five hundred ties to the mile be placed in track between Oreland and Oreland Junction, and a number sufficient to keep track safe on the freight connection with the New Jersey Central; that all open places in track be filled in with ballast where required; that all joints be fully bolted; all bolts tightened and spikes driven home; that track be put in line and surface; that a derail be placed in switch near Oreland (there is a split switch at this point, if cars started they would run out on main line); also place derails in all switches where, if brakes were released, cars would run out on main track. That targets be placed on all main line switch stands and kept painted, and that loose stones be taken down in all cuts.

Bridges.—The important bridges on this line are being rebuilt in accordance with recommendations previously made, resulting

from field inspections and analytical examination to determine the stresses in them under the maximum loads in use by the company.

The new Rockaway River bridge is in service. New material for the bridge over the Lackawanna Railroad is on the ground, and erection has begun. The bridge over the Central Railroad is the next in order for replacement. Foundation pedestals for this bridge are at present completed. Fill on the long trestle is steadily progressing and should be completed by the end of the summer.

The remaining bridges on the line are small and are in the same condition as last year.

TRENTON, LAWRENCEVILLE AND PRINCETON RAILROAD.

This road extends from Trenton to Princeton, a distance of eleven and three-tenths miles. It is operated by overhead trolley. Movements are governed by signal lights. The road is ballasted with cinders, gravel and dirt from Trenton to Lawrenceville in good quantity; north of that point, fair. The rails are in good condition. The percentage of unsound ties is small, and the track is in fair line and surface and in safe condition for the traffic.

Recommendations.—That all unsound ties be replaced; that additional shoulder be placed at the approach to all bridges, as indicated by chief inspector to railroad company on inspection. Clean ditches in cut north of Lawrenceville and in Baird's cut. This work to be done before December 1st, this year.

Bridges.—There are fifteen bridges on this line, five of which contain steel spans. The steelwork is all good. Timber bridges are in fair to poor condition and should have renewals made this fall, as indicated below:

West Branch Shabbekunk creek—Renew defective ties and guards and repair south abutment. Place inside guard rails across bridge.

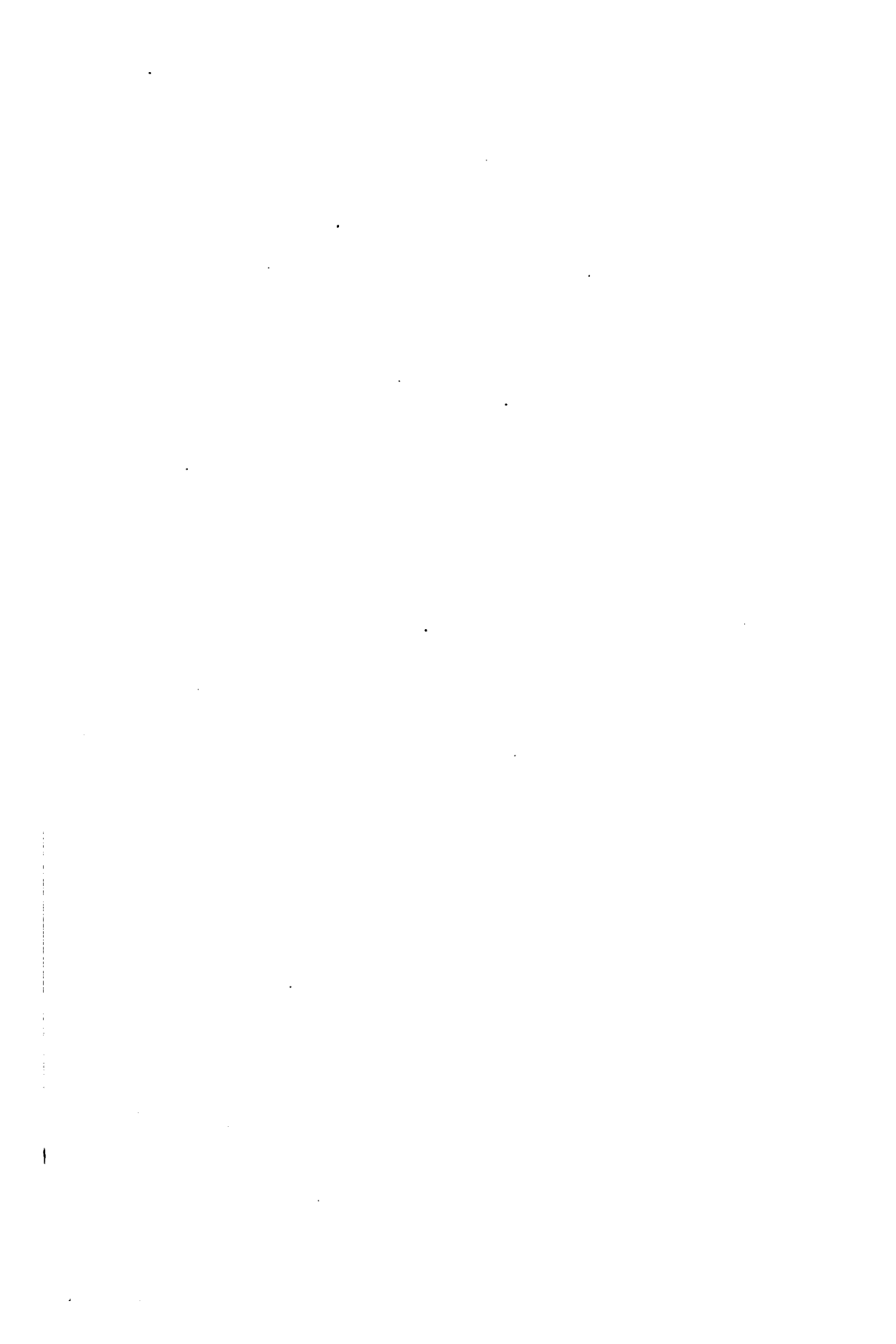
East Branch Shabbekunk creek—Renew defective ties and guards. Place inside guard rails across bridge.

Cattle pass, south of Lawrenceville—Renew ties and wall caps.

Hendrickson's woods—Renew ties and guards.



These bridges were built during the year, following the Board's recommendations. They replace old structures which, upon examination and calculation of stresses, were found to be badly over-strained.



Maple's cattle pass—Repair south abutment wall and renew stringers.

Van Kirk's cattle passes, Nos. 1 and 2—Both should be entirely rebuilt, including the masonry; or be replaced with iron pipe.

Stony Brook—Timber trestle approaches to this bridge, especially on north end, are in very poor condition, and should be thoroughly gone over and have necessary repairs and renewals made to timber-work. Speed should be limited to fifteen miles per hour across this bridge until repairs are made.

All inside guard rail points should be protected by a beveled block, sloping from top of rail to ties and securely spiked down.

Recommendations.—Repair bridges, place inside guard rails, and restrict speed over Stony brook bridge; all as noted above.

HUDSON AND MANHATTAN TUNNEL RAILROAD COMPANY.

The road extends, in New Jersey, from the center of the river opposite Hoboken to the center of the river opposite Pennsylvania Railroad station, Jersey City, running along the river via Delaware, Lackawanna and Western Railroad, Erie Railroad to the Pennsylvania Railroad station at Jersey City, a distance of six and eighty-nine hundredths miles of main line and twenty-eight hundredths mile of side track.

From Hoboken to the center of the river sixty foot rails are laid, the balance thirty-three foot, eighty-five pounds to the yard. Angle bars are twenty-six inches long, four bolts each. Ties are principally oak, 8 by 6, 7 feet long. Goldie tie plates are used with screw spikes. Ties are spaced eighteen inches, center to center; ballast is of trap rock. Operation is third rail. Signals are located maximum fourteen hundred, minimum seventy-five feet. Green for safety, yellow for caution, red, stop. Automatic trips in track are installed at each signal throughout the system which, if a motorman runs past signal at danger, will set the brakes and stop the train. There are signal towers at all points where interlocking is installed, operated electrically and electro-pneumatically. There are no crossovers, except in yards, for an opposing movement. All switches have split points. The

line is equipped with headway minimum of one and one-half minutes.

Maximum speed is forty miles per hour, number of cars in train, one to eight.

Stations: Hoboken Terminal, Pavonia Avenue, Erie Railroad and Pennsylvania Railroad. A station is now in course of construction at Henderson street.

Clearance between top and sides of cars, nine inches. Everything practicable seems to have been done to safeguard both the patrons and employees.

ATLANTIC CITY AND SHORE RAILROAD.

This road extends from the inlet at Atlantic City to Longport, a distance of eighteen and twelve-hundredths miles; from Atlantic City to Ocean City Boardwalk, a distance of thirty and five-hundredths miles; actual mileage owned by the Atlantic and Shore Railroad, four and seventy-seven-hundredths miles; total miles maintained, forty and thirteen-hundredths miles. The West Jersey and Seashore Railroad maintain the portion of the Newfield Branch over which the Atlantic City and Shore Railroad runs, and also from Bay Shore to West avenue, Ocean City, a total distance of eight and four-hundredths miles.

This road crosses the Atlantic City Railroad and the West Jersey and Seashore Railroad at grade in Ocean City; no signals. The electric cars stop before crossing; steam cars do not. There is a man stationed on the crossing with a flag.

At Atlantic City it crosses the Atlantic City and the West Jersey and Seashore Railroad twice. Two of the crossings are used for freight purposes only.

The cars are operated by overhead trolley, with the exception of that point between the Atlantic City drawbridge and Pleasantville, when the third rail is used.

The southbound track from Pleasantville to Somer's Point is in good condition; also from there to the Boardwalk, Ocean City, with the exception that it is a little out of line and surface. Fifteen hundred ties are required in the northbound track between Somer's Point and Pleasantville and six hundred between Vent-

nor and Longport. All the rail is in good condition. The track is ballasted with gravel and cinders in good quantity, and is maintained in a safe condition for the traffic.

Recommendations.—That fifteen hundred ties be placed in the northbound track between Somer's Point and Pleasantville, and that six hundred ties be placed in track between Ventnor and Longport, all to be done during the present year.

Ocean City Division.

Bridges.—The bridges on this line are all in good condition. Thirty-ton trolley cars are the heaviest loads operated on them. Inside guard rails are placed on all bridges over thirty feet long, and points of same are properly protected, except on the two bridges over Thoroughfare and High Trestle, where inside guard rails should be brought together at least a rail length beyond end of bridge, facing the direction of traffic, and have all such points protected by a sloping block, same as on other bridges of the line.

There are three drawbridges on the line. A deck plate girder over the Thoroughfare, in Atlantic City, a through plate girder at Somer's Point, and a through plate girder at Ocean City.

Recommendations.—Protect ends of inside guard rails on the two bridges near Atlantic City, as noted above.

Atlantic Avenue and Longport Division.

There are no bridges on this line.

TRENTON AND NEW BRUNSWICK RAILROAD.

This road extends from Trenton to Milltown, a distance of twenty-three and one-tenth miles. It is operated by overhead trolley.

The cars are all run by telephone and signal lights, maximum speed forty miles per hour.

Recommendations.—That twelve hundred ties be placed in track, about seventy per cent. west and the balance east of Plains-

boro. That the switch ties be renewed west end of Conover switch.

That the track be kept in as good line and surface as possible. That the ditches in Cranbury, Housel's and sand cuts be cleaned. All of this work to be done during the present year.

Bridges.—There are twenty-four bridges on this line, all single track wooden trestles, varying in length from one to ten spans of from twelve to fourteen feet each, excepting the crossing of the Monmouth and Jamesburg Branch of the Pennsylvania Railroad, which is a steel through plate girder span on steel columns, flanked on either side by a timber trestle approach. The bridge over Parson's lane also contains a central span of two twenty-inch steel I-beams under each rail. There is one concrete arch near Milltown in good condition.

The maximum loads carried are eight-wheel suburban trolley cars, weighing, when loaded, about thirty tons. Between Pennsylvania connection and the power house fifty-ton coal cars are carried, but at low speed.

The condition of the trestles is fair to poor. Repairs have been made from time to time, but not in sufficient quantity to insure safe operation for an extended period. A list is given below of the most urgent renewals which should be made during the present fall and winter.

Pipe should be substituted for timber at small openings wherever possible.

Riley's bridge, one span—Renew ties and stringers, or replace with pipe.

Edinburg road—Renew ties and guards and one stringer.

Middle bridge, nine spans—Renew defective stringers.

East Assanpink bridge, one span—Renew cap and piles under east abutment.

Power-House bridge, ten spans—Renew defective ties and spike all ties to rail.

Cranbury bridge, eight spans—Renew defective ties and repair guards.

Bergen's bridge, one span—All poor. Place pipe here.

Devil's Brook, west, two spans—Renew defective ties and renew soft stringers.

Devil's Brook, east, one span—Repair guards.

Red Jacket's bridge, three spans—Repair guards.

Nevius' Brook, one span—Renew caps under abutments.

Ireland Brook, two spans—Renew guards.

Hoey's bridge, one span—Renew defective ties.

Lawrence's brook, on curve, ten spans—Renew two caps, one guard and defective ties.

Recommendations.—That bridge repairs, as outlined above, be made during the present fall and winter.

Inspection of Equipment.

The reports of the Board's Inspector of Equipment submit a vast amount of detail in regard to the condition of the rolling stock of the railroads operating in this State. The following is submitted from these reports:

ATLANTIC CITY RAILROAD.

Forty-six locomotives were inspected, some of which belong to the Philadelphia and Reading Railway Company. Heavy repairs to locomotives are made at the Reading shops, light and running repairs only at the Camden shops. The boilers are looked after closely, stay-bolts being tested frequently, and those found defective immediately removed. A few locomotives are of old design, but boilers are in good condition. Tires, wheels and machinery appear to be well cared for. Safety appliances are good, and ash pans conform to law.

Ninety-four coaches were inspected, one of them being Reading equipment. General condition is good, more attention being given to cleaning toilet-rooms than last year, and the appearance is improved. Cushions cleaned, to some extent, by vacuum process; floors are mopped, and other parts carefully cleaned. A few coaches need cleaning and varnishing on the outside, otherwise appearance is good. Trucks, brakegear, platforms, etc.,

appear to be in first-class order. Safety appliances are well maintained, except that some coaches have not, as yet, had grab irons applied to end sills.

CENTRAL RAILROAD OF NEW JERSEY.

Two hundred and forty-two locomotives inspected, of which one hundred and twenty-eight are assigned to the southern division, balance to main line and branches. Twenty-six locomotives were in Elizabethport shops for extensive repairs. Boilers are very carefully looked after, and every precaution is apparently taken to avoid keeping in service any locomotives that need boiler repairs. A few locomotives built in 1875 and 1876, and some that were built in 1880, are still in use with the original boilers. These locomotives are subjected to regular hydrostatic test, given regular monthly inspection, and have fire-box renewed when necessary, and pressures reduced at intervals. Rigid detailed inspection is made of machinery and safety appliances. Ash pans conform to the law.

Three hundred and sixty-four passenger cars inspected. General condition was very good; cars and toilets are well cleaned, with the exception of two or three toilets upon branch lines, which, upon notice, were given proper attention. At the shops improvements are being made by applying steel under-framing to platforms and cast steel truck frames to cars. Some new coaches, first-class in every respect, seating seventy-five passengers, have been recently purchased. Safety appliances are all in good order, with grab-irons on all coaches.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD.

One hundred and eighty locomotives inspected. Reported that the locomotive equipment has been well maintained, that since the last inspection several new locomotives have been put in service, and new fire-boxes applied to boilers where needed. The old method of continually patching fire-boxes has, in a great measure, been stopped, and when fire-boxes need general repairs new sheets are applied. Since the last inspection, seventeen locomotives have been withdrawn from service, and twenty more are recommended to be withdrawn as being unfit for present conditions of service.

Inspection of two hundred and twenty-four passenger coaches and combined cars showed all main line cars to be in excellent condition, and, with few exceptions, those on the branch lines were also found to be in good condition. The attention of the railway officials was directed to sharp flanges under combined car 835, and to the necessity of flushing hoppers in cars used on the Chester and Hampton branches. Orders were issued by the Company to have wheels changed and toilets kept in a clean condition. Since last inspection, wood platforms have been replaced by steel on ninety-five coaches. The cleaning methods and general attention given to sanitary requirements are reported to be thorough and commendable. Individual drinking cups are being placed on coaches used in the through service.

ERIE RAILROAD.

One hundred and eighty locomotives inspected. Some improvement is noted since last inspection in the care and maintenance of locomotives, mostly in renewal of fire-box sheets, flues and stay-bolts. Former practice of continually patching fire-box sheets has been stopped and new half or full side sheets are being applied when necessary. Running gear, tire turning, and care of safety appliances well maintained. The attention of proper officials was called to repairs advisable for a number of locomotives, which had leaking boilers, defects in tires or machinery. Prompt attention was given to these and necessary repairs made.

Three hundred and sixteen passenger cars inspected. Coach equipment is, in general, well maintained. Some coaches have not yet been equipped with grab-irons to the end sills. These are being applied as coaches are held for repairs and some are being put on at the Jersey City terminal. Since last inspection there has been an improvement in the cleaning of the interiors of coaches and a very decided improvement in the care of toilets. Safety appliances, trucks, etc., are well maintained.

LEHIGH AND HUDSON RIVER RAILROAD.

Equipment of this road found to be in fair condition, except the hopper of combination car No. 1, which, it was recommended, should be cleaned regularly.

LEHIGH AND NEW ENGLAND RAILROAD.

Locomotives reported in fair condition. Reported that the toilet of Erie combination car No. 845, used by this road, is not kept in sanitary condition and that bolts are missing from the truck pedestal. It was recommended that the hoppers should be cleaned with a strong deodorizer and kept clean. The railroad company advised that the irregularities reported would be given immediate attention.

LEHIGH VALLEY RAILROAD.

Ninety-four locomotives were inspected. In general, they appear to be well maintained. No general repairing is done in this State. There is a round-house at Perth Amboy with a machine shop attached. At Jersey City, where about twenty-five locomotives are kept in service, there is no round-house. There is a small building located here, with a few machines, but all work to locomotives, washing of boilers, etc., is done out of doors. The company stated, with respect to this, that the only locomotive boilers washed out and inspected at Jersey City are the local switch engines and that during the winter months switch engines are forwarded from Jersey City to Perth Amboy or South Easton, Pennsylvania.

One hundred and six passenger coaches were inspected. All used in regular train service appear to be in good order, of modern design and fitted with all necessary equipment. Safety appliances reported well maintained and grab-irons on all passenger equipment.

MORRISTOWN AND ERIE.

Locomotives reported in fair condition. Combination car No. 1, used between Essex Fells and Morristown, reported lacking safety rods over baggage and side doors, and that repairs are needed to toilets. Subsequent inspection showed that the defects have been corrected.

MOUNT HOPE MINERAL RAILROAD.

This company purchased a second-hand locomotive, which it had tested by an inspector of the Hartford Steam Boiler Inspec-

tion Company, and at the time of the test notified the Board's inspector to be present. Following this inspection the Board's inspector made the following report:

"The staybolts in this locomotive are solid. The regular method adopted by railroads in general is to drill holes in the outer end three-sixteenths of an inch in diameter and not less than one inch deep, which are known as tell-tale holes, so that when staybolts break, steam and water pass through these holes and indicate the condition of the staybolts. There are certain parts of fire-boxes where stay bolts are more liable to break than others; these parts are called the danger zones. As on the small railroads the inspection of boilers, and particularly of staybolts, by the companies, is very irregular, I would recommend that this railroad company have tell-tale holes drilled in the staybolts of their boilers.

NEW YORK, ONTARIO AND WESTERN RAILROAD.

Twelve locomotives inspected and all reported to be in good condition. An effort is being made to overcome the nuisance from soft coal smoke and one of the locomotives is equipped with an experimental smoke-consuming device.

Forty passenger cars were inspected and it is reported that this company pays strict attention to the maintenance of their equipment, regarding, particularly, clean conditions and rigid sanitary methods to keep coaches in good order. Disinfectants are used regularly and passenger cars fumigated with formaldehyde at stated periods. Since the last inspection steel-tired wheels and grab-irons have been applied to second-class and immigrant coaches.

NEW YORK SUSQUEHANNA AND WESTERN RAILROAD.

Sixty-eight locomotives were inspected. It is reported that during the past year these locomotives have been fairly well maintained and are in fair general conditions. Some improvement has been made by putting half sheets in the sides of fire boxes and safe ending of flues. Some of the locomotives are twenty-five years old, and because of age and service, steam pressure must be reduced, impairing their efficiency.

Seventy-nine passenger cars were inspected. It is reported that the interiors of coaches have been improved since previous inspection, and that the Board's recommendations in regard to the care of toilets, dusting of cushions, etc., have been followed, and that general conditions are much better. Grab-irons have been applied to all but three coaches and trucks; brakes and running-gear appear to be well looked after. Modern platforms with wide buffers are being applied to coaches as they pass through the shop. No new equipment has been added since last report.

PEMBERTON AND HIGHTSTOWN RAILROAD.

This road has three locomotives, two of which are in daily use, the other being used as an extra. All safety appliances are in order, except that it will be necessary to change the ash pans on Nos. 4 and 5. Stay-bolts are solid, and tested only three or four times each year. The recommendation was made that when new stay-bolts are applied, tell-tale holes be put in.

Since last inspection there has been a decided improvement in cleaning coaches, toilets, water-coolers, etc. All recommendations made have been complied with, and the cars compare favorably with any used in local service. Safety appliances are all good except there are no grab-irons on the end sills of coaches.

PENNSYLVANIA RAILROAD.

Two hundred and ninety locomotives operated upon the various branches of the Pennsylvania Railroad in this State were inspected. The greater proportion are of the latest modern build. A few old locomotives are to be retired at an early date. Particular attention appears to be given to the maintenance of high rate of efficiency, machinery being inspected after each trip, boilers washed out frequently, stay-bolts inspected every seven days. In general, the rules adopted by the company appear to be well carried out. Safety appliances are well maintained. The appearance of locomotives is improved since last report, owing to more thorough wiping of tenders, cabs, etc.

Many switch engines are equipped with steam fire-extinguishers, for use in case of fires around station terminals.

Four hundred and eighty passenger cars were inspected and conditions found satisfactory, except that grab-irons have not been applied to the end sills of all the coaches. Some are being put on, and it is anticipated that all coaches will be finished in a short time. Other safety appliances are well maintained and sanitary conditions are good. Since last inspection a large number of all-steel coaches have been put in service. Cast-iron wheels are being replaced by steel wheels, and larger journals are being applied to the first lot of steel cars. More attention is given to cleaning outside of coaches than last year, and their appearance is much improved.

PHILADELPHIA AND READING RAILWAY.

Fifty-six locomotives inspected, of which fourteen are used on weekday passenger service between Jersey City and Philadelphia, the rest being used in freight, switch and local passenger service. Locomotives appear to be well maintained. All standard safety appliances, etc., are in good condition, and all ash pans are arranged to comply with the law.

Thirty-six Philadelphia and Reading Railway passenger coaches were inspected, and also twelve Royal Blue and twenty-eight regular Baltimore and Ohio Railroad coaches that are used between Jersey City and Philadelphia. All were found to be in good order and well cleaned. Trucks, etc., are all kept in first-class condition, and all safety appliances well maintained, with the exception that some of the coaches used on local trains between Trenton and Philadelphia have no grab-irons on the end sills.

RARITAN RIVER RAILROAD.

Reported that since last inspection one locomotive has been withdrawn from service, on account of bad condition, and another has been withdrawn from regular road service, being used only as an extra freight locomotive and in construction service.

Two locomotives have had new fire-boxes applied since last inspection, and are reported in good condition. Locomotive No. 3 is reported to be in fair condition.

Combined car No. 7 and coach No. 5, used on regular trains, are reported to be in bad condition. It was stated by officials of the road that it is the company's intention to retire these cars from service at an early date. There is little travel on this line, except in the morning and evening when a number of employees are carried to and from various factories. Freight cars are used for hauling brick, clay, etc., and in construction work, and are not permitted to go off the road. The air-brake equipment is on a number of cars, but is not generally maintained, and it is considered, in view of the nature of service, that the use of air-brakes does not seem to be necessary. Other safety appliances appear to be well maintained.

RAHWAY VALLEY RAILROAD.

Equipment reported in fair condition. Four locomotives are owned by the company, but only two are in service. Wharton & Northern locomotives of this company have not had hydrostatic test applied, and steam gauges are reported as not being regularly tested. Locomotive No. 5 reported to be in need of repairs, and officials of the road advised that the repairs will be made. It was recommended that the locomotives be subjected to hydrostatic test, and that steam gauges be tested every thirty days.

TUCKERTON RAILROAD.

This road has three locomotives, two in regular service. Nos. 4 and 5 are in very good condition, with all necessary safety appliances in order, except that No. 5 will have to have ash-pan changed to conform to recent requirement of the Interstate Commerce Commission. Locomotive No. 3 was built in 1885, and needs some repairs, particularly to the tender, there being no grab-iron on the back. Boilers are washed regularly and stay-bolts have tell-tale holes. Recommendations made with respect to passenger coaches, following the last inspection, have been

carried out, and coaches are now in good condition, except that there are no grab-irons on end sills. Wheel under the baggage end of combined car was found to have a worn flange, and it was recommended that this be taken out, which was promptly done. Recommendation was made that disinfectants be used in the toilets.

WHARTON AND NORTHERN RAILROAD.

Inspection of Wharton and Northern locomotive No. 7 showed the same to need flue renewals, tire turning and some other repairs. It was recommended that locomotives on this road be subjected to hydrostatic test and steam gauges be tested every thirty days.

WEST SHORE RAILROAD.

Sixty-five locomotives inspected and reported to be generally in good condition. Some are in need of new side sheets in fire-boxes, and a few require new tires on tender-wheels. Since previous inspection provision has been made for more frequent boiler washing, care of gauge-cocks, gauges, etc. Safety appliances are carefully maintained, locomotives kept reasonably neat and clean. Experiments are being made with a view to eliminating the smoke nuisance. Two different devices are being experimented with. One a patent device, which, it is stated, has apparently considerable merit. but has not been in use long enough to prove reliability in continued service. The other is an old idea, changed to suit conditions, and consists of a series of steam jets along each side of the locomotive, which draw air in from the outside end, and which, mingling with the steam, mixes with the smoke and gases, which are consumed under the brick arch. It is reported that the black smoke still comes from the stack unless the fireman is careful and fires cautiously.

Accidents.

Three accidents which occurred during the year have been deemed to be of sufficient importance to call for a public investigation and the announcement of the findings of the Board. Two of these accidents occurred upon the same day, April 19th, 1909, on the line of the Central Railroad, near Communipaw station.

The report of the Board upon these accidents is as follows:

"The testimony given at the hearing held by the Board at the Chancery Chambers, in Jersey City, on May fourteenth, nineteen hundred and nine, covered two accidents in question, and we distinguish the accident occurring first as No. 1, and that following as No. 2.

ACCIDENT No. 1.

"From the testimony it appears that train No. 241, which left Jersey City Terminal at 6:46 A. M., was collided with from the rear by train No. 707. It also appears that the engineer of train No. 707 ran past signal at danger, which is located just east of Communipaw station. The rear of train No. 241 was evidently very close to and just west of said signal, and the testimony of the engineer of train No. 707 was that he passed this signal only by half the engine's length, and the fact that the compact was slight seems to substantiate this statement. That there was a dense fog in the vicinity of Communipaw station on the morning of April 19th also appears. The explanation offered by the engineer of train No. 707 for the collision is that he was unable to see the signal until abreast of the same, his engine running backward at the time. It is generally agreed that such a collision would not occur in clear weather, but the engineer of train No. 707 is not relieved by this explanation, as Rule 976, which requires that trains in stormy or foggy weather run at such a reduced rate of speed as to be able to stop within the distance that the indication of the signal is distinguishable, was in force.

"It is apparent that had the engineer of train No. 707 positively regarded Rule 976, no part of his train would have passed the signal and the collision would not have occurred.

RECOMMENDATION.

"Taking into consideration the frequent movement of trains upon this line and the close proximity of the signal above mentioned to the Communipaw station, and the danger of accident, from even a slight disregard of Rule 976, to trains standing in said station, the Board is of the opinion that, unless some reason to the contrary not heretofore made known to the Board appears, the signal on track No. 6, now located about two hundred feet east of Communipaw station, should be moved eastwardly two hundred feet, for the better protection of trains standing in said station, especially in times of stormy and foggy weather.

ACCIDENT No. 2.

"The second accident occurred twenty minutes after the first, on track No. 2, at Communipaw station. Because of the blockade caused by the first accident, train No. 711, leaving Jersey City Terminal at 6:57 A. M. and bound for Newark, was ordered to proceed to Cranford on track No. 4. The engineer of train No. 711, according to his testimony, concluded that the order contemplated a stop at Communipaw station, while the contrary appears to be true. Train No. 711 stopped at Communipaw station, and while there was collided with in the rear by a special train known as the 'Pay Train.' While the compact in this instance resulted in considerable damage to property, no serious injuries or loss of life resulted.

"As the stop made by train No. 711 at Communipaw was an unusual one, it was the duty of the conductor of this train to provide for protection in the rear, by seeing that

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the flag was back far enough to insure such protection. It appears from the testimony that the flagman was not more than 150 feet to the rear of train No. 711 when the Pay Train passed him and crashed into No. 711.

"It was also the duty of the flagman of train No. 711 to drop off before the train came to a full stop, which, from the testimony, he appears not to have done, and which, if done, would probably have enabled him to go back a sufficient distance to protect his train.

"The testimony also discloses the fact that the engineer of the Pay Train disregarded the signal set at danger, which, if regarded, would have prevented the collision.

RECOMMENDATION.

"Accident No. 2 resulted from the failure of the employees to regard the rules, and the Board would recommend to the railroad company a more positive insistence of observance of Rule No. 976."

ACCIDENT, PENNSYLVANIA RAILROAD, JERSEY CITY.

The most serious of the year with regard to the number of casualties, occurred at Jersey City, on the line of the Pennsylvania Railroad. The following is the report of the Board upon this accident:

"On November sixth, nineteen hundred and nine, an accident occurred upon the line of the Pennsylvania Railroad, at Brunswick street, in the city of Jersey City, involving collision of a passenger train with a light engine, and resulting in the death of two engineers, one fireman and one trackman, and in injuries to two employees of the company and to some forty passengers. This accident having been reported to the Board, and investigation made by its Inspectors in the ordinary course of their duty, and the result thereof reported to the Board, the Board determined that the public interest required that an investigation should be made forthwith, in accordance with section seven of the act creating the Board, and fixed Friday, November nineteenth, at the rooms of the Riparian Commission, Commercial Trust Building, Jersey City, as the time and place of conducting such investigation. At that time and place, the Board having assembled, adjournment was taken to the Chancery Chambers in the same building.

"Prior to the time of the determination by the Board to conduct such an investigation, a communication addressed to the Board by W. H. Meyers, the General Manager of the company, was received, advising the Board that the company had determined to institute an investigation by experts to ascertain the cause of the accident and to suggest improvements, if any should be found necessary, and requesting that the Chief Inspector of the Board should be permitted to serve with such a committee of experts. The Board acquiesced in this request, and instructed its Chief Inspector to act in conjunction with such committee. The committee of experts, so appointed by the company, made an investigation and report prior to the time fixed for the investigation by the Board, and the report, in writing, of the committee, was, at the opening of the investigation, laid before the Board by the company. A copy of such report is attached hereto, marked Exhibit A, and made part hereof.

"At the request of the Board, the company voluntarily produced before the Board the following of its officers and employees:

John F. Chandler, Supervisor of Division A.
Frank S. Kent, General Car Inspector.
Charles Maier, Assistant Round-house Foreman, Waldo Avenue Round-house.
Daniel K. Mead, Fireman.
Welles M. Post, Supervisor of Signals, New York Division.
John Veal, Repairman at 'RU' Tower.
George S. Coe, Repairman at 'RU' Tower.
Daniel Harrington, Towerman at 'RU' Tower.
Harry F. Spillinger, Ticket Agent at Jersey City.
James S. Teany, Passenger Agent, Market street, Newark.
Frank L. Sheppard, General Superintendent.

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"The examination of these employees established that the accident occurred on Saturday, November 6th, 1909, at about 8:45 in the morning; that involved in the collision was a passenger train, consisting of five cars, known as train No. 104, and a light engine, known as No. 3175; that the accident occurred at Brunswick street, in the city of Jersey City, at the tower known as 'RU'; that it resulted in the derailling of the engines, which were thrown on different tracks, the baggage and mail car being thrown across the tracks, the smoker thrown on its side, and the remaining three coaches slightly derailed; that the killed and injured were as hereinbefore noted.

"It appeared that prior to the accident engine No. 3175 was moving on the eastbound service on No. 2 track, on its way to the station to take a westbound train, and had received a clear signal. Train No. 104, also moving east, had received a clear signal, but the electro-pneumatic switch from track 3 to track 2 was open, and the engines came into collision at a point east thereof.

"It appeared that some five minutes prior to the accident an engine had crossed from track No. 1 to track No. 4, and that the operator at the 'RU' tower had reset the switches for the straight route. The indicator at the tower at that time, according to the testimony, showed that the switches were released, permitting the operator to give a clear signal.

"It appeared from the testimony that the tracks, frogs and switches at this point are regularly inspected by track walkers four times a day, and that the regular examination of that part of the tracks, frogs and switches involved in this accident last made prior to the accident disclosed that the tracks, frogs and switches were in perfect condition.

"The testimony further showed that regular examinations of engines and cars are made at terminal points; that such examination was made of the engine and cars involved in this accident; that no defective conditions were reported; that after the accident the wheels of the engines and cars were still intact, and that an inspection of them showed no defects, and only slight scars, which were due to contact with frogs and switches in the accident.

"The possibility that the accident was due to a defect in tracks, frogs or switches, or to a defect in the equipment of the engines or cars was, therefore, reduced to a minimum.

"The testimony showed that immediately after the accident it was discovered that the contact spring known as the 'X' spring, part of the electro-pneumatic machine located at the 'RU' tower, and controlling signals and switches, had crept or lengthened, and that the spring had at once been shortened.

"The testimony before the Board, together with tests and the report made by the committee of experts appointed by the railroad company, indicated that the accident was due to this creeping or lengthening of the 'X' spring, which permitted it to come in contact with its band, thus closing a circuit and allowing switch points to remain open from tracks 3 to 2, and at the same time allowing a clear signal to be given for movements on tracks 2 and 3. That this was the cause of the accident was also indicated by the testimony of the fireman of train No. 104, to the effect that he looked ahead and saw both home and distant signals clear, and from the conditions found on the ground, namely, that the switch leading from track 3 to 2 was open, when, in accordance with the signals, it should have been closed.

"As this machine is constructed, the space between the springs and the 'X' and 'Y' bands, at the first position of the lever, is one-half inch, and such space is reduced, when in the indicating position of the lever, to three-thirty-seconds of an inch. While it appears that it had been supposed that it was impossible, where this machine was used, to have a clear signal given and switches open, except for the designated route, yet it appeared affirmatively that at Trenton, New Jersey, in July, nineteen hundred and nine, the machine there located on the line of the Pennsylvania Railroad, which is of the type of the machine located at the 'RU' tower, had similarly failed, although no accident resulted, and that the failure had been called to the attention of the supervisor of signals by the operator there stationed; that thereafter the supervisor of signals issued instructions to the repairmen to maintain a close oversight over the 'X' and 'Y' springs and contact bands in these machines.

"These instructions were issued to and received by competent repairmen, who are maintained at the 'RU' tower during the day and night.

"The instructions were, so far as appears from the testimony, not explicit, and did not require any given course of conduct on the part of the repairmen. So far as appears, while these instructions did not require and were not followed by regular inspections of

the entire machine, the testimony shows that inspections were made daily of the distance between the 'X' and 'Y' springs and contact bands. Of these inspections no reports in writing were required or made. The Board finds that the accident was due to the creeping or shifting of contact point of a spring on the combination board with relation to its band on the roller.

"On the report of the committee of experts before referred to, and the testimony of the Supervisor of Signals of the Delaware, Lackawanna and Western Railroad Company, who appeared before the Board, on which line of railroad similar machines, to the number of four, are in use, the Board concludes that the fastenings of the contact springs on the combination board of these machines should be strengthened, and that the spring should be arranged so that there will never, when in the indicating position of the lever, be less than one-eighth opening between the 'X' and 'Y' springs and their respective bands on the roller; that the repairmen in charge of the machine should be provided with instruments for the accurate measurement of such openings; that specific instructions should be issued to them requiring daily inspections, in accordance therewith, of the machine, and particularly those parts which caused the failure; that complete tests of the machine should be made at regular intervals, by a person possessing the expert knowledge which the repairmen lack; that the results of such daily examinations and such tests should be reported in detail, in writing, signed by the person making the same, to the superintendent of transportation and supervisor of signals, and that such reports should remain permanently a part of the records of the company, and that such further and other measures be taken by the company as may be necessary to prevent a failure of this machine and its connections, making it impossible to clear the signal when the block is not clear and the switches in proper position.

"At the investigation it was urged that advanced railroad practice favored the reduction of the use of written reports to the minimum. Whether or not this is so, the Board concludes that the requirement of reports in writing recommended by it is not only justified, but essential, as an assurance that regular examinations and tests are made in accordance with the contemplated instructions, and to fix individual responsibility, if such responsibility exists, in the event of a failure of the machine.

"In connection with this accident complaint was made to the Board by various persons that, although the accident occurred at 8:45 o'clock in the morning, and although for the greater part of the day the wreck prevented and impeded the passing of trains into Jersey City terminal, tickets were sold to passengers desiring to reach Jersey City at the various stations upon the lines of the company; that no notice of the wreck or probable duration of delay was given, in connection with the sale of tickets, and that in consequence large numbers of persons purchased tickets, took trains for Jersey City, and were held and delayed along the line, and particularly outside of Jersey City, for many hours; that while so delayed along the line, in positions where it was impossible for them to do anything except continue upon the trains, information as to the cause of the delay and as to its probable duration was withheld from them.

"These complaints are, under the testimony produced before the Board, fully substantiated. While the testimony is that the sale of tickets was discontinued at the Jersey City station, and while it was suspended for a time at the Market street station, in the city of Newark, the sale of tickets at this station was resumed at a quarter past eleven o'clock in the morning, many hours before the wreck was cleared. While the testimony is that the sales were made 'subject to delay,' no explanation was given to intending purchasers as to the probable duration of the delay.

"So far as the information before the Board is concerned, intending passengers who did not stop at the ticket office for the purpose of purchasing tickets, were permitted to enter trains which stopped at the station during the period of delay, without information that the train would be delayed, and so without information of the probable duration of the delay, even after it had come to the knowledge of the operating officials of the company that the original estimate of the time that would be required in the removal of the wreck, repair of tracks and restoring of the running of trains would be greatly exceeded, because of the fact that steel cars were involved in the wreck, and the wrecking appliances employed were not adequate to meet the new conditions.

"The testimony taken discloses that the agent at Trenton was furnished no information of the wreck and the delay consequent thereon, and that he continued the sale of tickets in regular course long after it was apparent at the Jersey City Terminal that the delay due to the wreck would extend over many hours.

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"On October 16th, 1907, the Board, recognizing the importance of notice to the traveling public of disarrangement of passenger service through wreck and other causes, forwarded to the several railroad companies operating lines within this State, including the Pennsylvania Railroad Company, a communication, copy of which is attached hereto and marked Exhibit B, and under date of October 21st, 1907, the Board received from the Pennsylvania Railroad Company a reply to such communication, copy of which reply is hereto attached and marked Exhibit C.

"It appears from the testimony that after the receipt of the communication of the Board by the Pennsylvania Railroad Company, instructions in accordance therewith were transmitted by the company to the various superintendents. So far as the suggestion of the Board for the posting of bulletins in a conspicuous place at each station, showing thereon the cause and the probable length of time the service would be interrupted and, when ascertained, the time the service would be restored, is concerned, investigation discloses that the suggestion has not been generally observed, and that in the case of the accident under investigation, the remaining suggestions made by the Board were, in part at least, ignored.

"The Board now repeats the recommendation contained in its communication under date of October 16th, 1907, and will, after consultation with the Attorney-General, promulgate an order in accordance with the recommendations heretofore made, insofar as it lies within the power of the Board to convert these recommendations into a mandate."

EXHIBIT A.

JERSEY CITY, N. J., November 16th, 1909.

Mr. W. Heyward Meyers, General Manager, Penna. R. R. Co., Philadelphia, Pa.

DEAR SIR—The committee, consisting of

Messrs. Axel Ames, Block, Signal and Train Control Board;

H. S. Balliet, N. Y. C. & H. R. R. R.;

J. P. Coleman, Union Switch and Signal Co.;

W. H. Elliott, N. Y. C. & H. R. R. R.;

W. McH. Grafton, Pennsylvania Lines West;

W. K. Higgins, C. R. R. of N. J.;

S. Johnson, Union Switch and Signal Co.;

E. B. Pry, Pennsylvania Lines West;

F. P. Patenall, B. & O. R. R.;

M. E. Smith, D., L. & W. R. R.;

A. H. Yocum, P. & R. Ry.,

convened at your request to consider the failure of Interlocking Plant "RU," Brunswick street, Jersey City, N. J., occurring on Saturday, November 6th, at 8:44 A. M., has the honor to report as follows:

Your committee had read to it, by Mr. Rudd, report giving results of the investigation made by special committee appointed by you to investigate this signal failure.

After hearing this report, the committee inspected the interlocking, it having been decided that a personal examination of the interlocking plant was desirable. An examination of all parts of the interlocking pertaining to this failure was made by the committee; a special investigation was made with regard to the insulation of circuits.

The testimony given by the various employees of the Pennsylvania R. R. on duty in and around the plant was read to the committee.

The committee examined Signalmen Harrington and Cahill, Maintainer Coe and Assistant Supervisor Dickinson.

As more properly placing before the committee the work they were asked to do, your letter of November 12th was read and fully discussed.

After hearing the testimony given and considering the matter in all its phases, the following conclusions were arrived at:

The failure occurring at "RU" interlocking, at 8:44 A. M., on the morning of November 6th, was, in our opinion, due to the shifting of the contact point of a spring on the combination board (technically known as the "X" spring) with relation to its band on the roller operated by switch lever No. 9, causing the improper releasing of the lever, which resulted in the lever being set normal while the switches No. 9 remained in position for the cross-over movement from Track 3 to Track 2, thus releasing the mechanical locking and permitting the clearing of the signals for movements on Tracks 2 and 3.

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With reference to any conclusions to be drawn from the failure and the points specifically raised in your letter, the committee unanimously agree to the following:

We believe that no changes should be made in the design of the interlocking machine or any additions thereto, excepting the strengthening of the fastenings of the contact springs on the combination board, and the springs arranged so that there will never, when in the indicating position of the lever, be less than a one-eighth inch opening between the "X" and "Y" springs and their respective bands on the roller. This will, with proper inspection, prevent the shifting of the spring, and this strengthening of the spring fastenings is recommended.

Our inspection of the interlocking apparatus on November 10th, 1909, developed that due care had been exercised in the maintenance of the plant; the tower and the machinery in the tower were found to be in the very best condition.

The committee found, upon its inspection of the plant, that the installation had been made, in all its parts, with proper care, good engineering practice having been followed at the time of its installation. No changes affecting this inquiry have been made since that time.

While the suggestion may be made that it is possible to make additions to the plant to bring the same up to a higher standard of the signaling art, and a number of suggestions for improvements were made by the members of the committee, on no one of which could the committee agree, it is not, in the opinion of the committee, advisable or practical to make additions and improvements generally, until the same have been shown by long experience to give the reliability and safety in signal working which all roads are endeavoring to secure.

Respectfully submitted,

(Signed) W. H. ELLIOTT,
Chairman.

EXHIBIT B.

BOARD OF RAILROAD COMMISSIONERS FOR THE STATE OF NEW JERSEY.

TRENTON, October 16th, 1907.

Mr. F. L. Sheppard,
General Superintendent, P. R. R.,
Jersey City, N. J.

DEAR SIR—I am instructed by the Board to inform you that all agents on your line should be notified whenever the passenger service has become disarranged through wrecks, fires or other causes, to post a bulletin in a conspicuous place at each station, showing thereon the cause and the probable length of time the service would be interrupted, and, when ascertained, the exact time the service will be restored. This information should be given by your station agents to passengers as they come to the ticket window to purchase tickets, and at your principal stations the train caller should announce it to passengers in waiting-rooms and on the platform. Conductors of delayed trains should also inform passengers. When the service is seriously interrupted, and agents have not been notified, they should communicate with the proper officials and ascertain the cause.

Immediate steps should therefore be taken, whenever the service is suspended, to have all agents and trainmen enroute informed, as it is important that full particulars be given to the traveling public in order to enable them to make arrangements for travel with the least possible inconvenience.

Yours very truly,

(Signed) JAMES MAYBURY, JR.,
Acting Secretary.

EXHIBIT C.

THE PENNSYLVANIA RAILROAD COMPANY.
NEW JERSEY DIVISION.

OFFICE OF THE GENERAL SUPERINTENDENT.

F. L. SHEPPARD, *General Superintendent.* JERSEY CITY, N. J., October 21st, 1907.

The Board of Railroad Commissioners of the State of New Jersey,
Trenton, N. J.

GENTLEMEN—It has been the practice of our company to inform our patrons, through the station masters, ticket agents, gatemen, etc., whenever the ordinary run of travel or

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connections have been interrupted, and at the same time advise as to the best routes by which to reach destinations, and this obligation is also incumbent upon our conductors.

We, however, will be very glad to arrange, taking effect immediately, for a literal compliance with your order of the 16th instant, that there be further a printed notice displayed giving all the available information we have.

Very truly yours,

(Signed) F. L. SHEPPARD,
General Superintendent.

INSPECTORS' REPORTS ON ACCIDENTS.

In addition to the formal investigation made by the Board as recorded above, the inspectors of the Board have been required to collect information and make reports to the Board upon all accidents attended by loss of life and also upon many others which have not resulted in fatalities, but which indicated the existence of conditions rendering examinations advisable. Where these conditions, in the opinion of the inspector making the examination, justified recommendations for improvements, such recommendations were embodied in the reports. These reports have been submitted to the railroad companies, with notice by the Board that the recommendations would be taken up for consideration at future meetings, dates of which were given in the notices. The railroad companies were then requested to submit any comments they might wish to make upon the inspectors' recommendations, or invited to be represented at the meeting when the same were considered. In most cases the Board was informed by the companies that the recommendations of the inspectors would be adopted. In some cases modifications of the recommendations were requested by the railroad companies. In some instances these were granted and in other cases recommendations of the inspectors were, after hearing, formally endorsed by the Board.

Extracts from the inspectors' reports which contained recommendations, together with these recommendations, are submitted herewith. A large number of other reports upon accidents where the conditions did not seem to justify any recommendation are on file in the office of the Board.

Central Railroad of New Jersey.—Randolph avenue—Jersey City.

A passenger upon an eastbound train left same at Arlington Avenue station, crossed westbound tracks to stone platform on the station side, then recrossed westbound tracks to reach Randolph avenue, and was struck and seriously injured. A detailed report upon conditions at this station was submitted to the railroad company, and it was recommended that improvements be made which would obviate the necessity of passengers, who alight from or board eastbound trains, having to cross westbound track. The railroad company expressed a willingness to comply with the recommendation, and later notified the Board that it would also do considerable additional work, involving the construction of a new station. To do this requires consent to be obtained from the local authorities for the connection of a new stairway to the overhead bridge at Arlington avenue. Negotiations for obtaining such consent are now under way.

Erie Railroad.—New York and Greenwood Lake Division—Devon street, Arlington.

A man driving a wagon over Devon street, Arlington, was struck and killed. Reported that there is a bell at this crossing. The crossing is protected by gates between 7 A. M. and 7 P. M. The view is obstructed until within twenty feet of the crossing. It was recommended that the crossing be protected both day and night.

The railroad company arranged to have gates operated at both Elm and Devon streets from a centrally located tower, affording night protection.

Pennsylvania Railroad.—Lumberton Station.

A wagon was struck at the first crossing south of Lumberton station and the driver died from the result of the injuries received.

The view of trains from approaches to crossing reported fair. Only three passenger trains scheduled on the Medford Branch, where this crossing is located. Steam escaping from the pipe of a factory near the track was found to obstruct the view, and at the suggestion of the Board the railroad company took this

matter up with the factory firm and the pipe was changed so as to obviate this.

Erie Railroad.—Crossing accident—Harrison street, Passaic.

Train No. 29 of the Erie Railroad struck a wagon, killing one horse and injuring another so that it was killed later. The crossing is protected by a flagman. This protection was considered unsafe, and it was recommended that gates be installed. This recommendation was adopted and gates have been installed.

New York, Susquehanna and Western Railroad.—Crossing accident—Near Vail's Station.

A carriage was struck on the highway one-half mile east of Vail's station, killing a woman and injuring the driver. The view is reported obstructed by side cut, which it was recommended should be cut down.

The company reported that it would comply with this recommendation.

Erie Railroad.—Crossing accident—Ridgefield.

An express delivery automobile was struck on the highway, fifty feet north of the Ridgefield Station. This highway is crossed by three tracks, two main and one siding. The crossing is protected by gates, operated by man in tower between the hours of 7 A. M. and 7 P. M. There is also a track circuit bell, which was ringing at the time of the accident. The towerman has a poor view of approaching trains. It was recommended that the siding be raised up to a level with the main track; that all trains reduce speed to six miles per hour over the crossing between the hours of 7 P. M. and 7 A. M., and that cars be kept as far back from the road as practicable.

The company agreed to raise the siding and keep cars back, but claimed that as all trains stop at the station between the hours of 7 P. M. and 7 A. M. it would not be necessary to issue restrictions for reduction of speed.

Central Railroad of New Jersey.—Crossing accident—Near Matawan.

Train 102, on the Atlantic Highlands Branch of the Central Railroad, struck a wagon, which was demolished; the horse

was killed and the driver slightly injured. There is no protection at the crossing. The view of the track is reported unobstructed and ample from three directions. It was recommended that trees be trimmed and brush removed to afford a better view of eastbound trains.

This the company agreed to do.

Pennsylvania Railroad.—Derailment—Medford Junction.

Switch was misplaced at Medford Junction, on the Amboy Division of the Pennsylvania Railroad, and passenger train No. 751 was derailed, slightly injuring four persons. It was recommended that a high stand be placed at the switch where the accident occurred, and that operators in the nearby tower be held responsible for keeping the same right for the main track at all times when not in use.

The railroad company advised it would comply with this recommendation.

Delaware, Lackawanna and Western Railroad.—Crossing accident—Fourteenth street, Roseville.

A wagon was struck by an engine of the Delaware, Lackawanna and Western Railroad, at Fourteenth street, Roseville, injuring the driver. The crossing is protected by gates operated day and night. The gateman was in his shanty at the time of the accident, but did not see the engine until it was too late to lower the gates.

It was recommended that a bell be placed in the gateman's shanty to notify him of the approach of westbound trains, it appearing that travel at this point, during certain hours of the day, is heavy, with trains running under close headway, and that with the gateman depending on sight alone gates were apt not to be lowered in time.

This recommendation was adopted by the railroad company, and signal bells, one for westbound and one for eastbound trains, also three indicators covering movements of east and westbound trains on the three tracks, have been installed.

New York, Susquehanna and Western Railroad.—Rear-end collision—Little Ferry Junction.

Passenger train No. 38 ran into the rear end of extra freight train No. 113, one-quarter of a mile east of Little Ferry Junction. The operator thought the freight train had pulled into the yard, and gave clear signal to the passenger train. Flag was not placed a proper distance in the rear of the freight train. It was recommended, as a result of this accident, that a second blade be placed on the first signal west of junction, eastbound track, to govern trains using the Edgewater Branch and switches in connection therewith. It was also recommended that, unless a change is made in the location of the tower within the present year, the cross-over and all signals and switches connected therewith be hooked up and operated by the towerman.

The railroad company agreed to comply with these recommendations.

Pennsylvania Railroad.—Crossing accident—Lenola.

Train No. 373 struck a carriage at the grade-crossing at the east end of the Lenola station, on the Amboy Division of the Pennsylvania Railroad. The carriage contained three occupants, one of whom was killed and another injured. The horse was killed and the vehicle demolished. The crossing is unprotected. It was recommended that a light be placed on the crossing to warn travelers on the highway at night.

This recommendation was adopted by the railroad company, which also ordered a signal bell placed on this crossing.

Lehigh and Hudson River Railroad.—Collision at Franklin Junction.

An accident occurred on the Passaic Zinc Company's track near their Buckwheat Mine. Two cars had been shifted up east of switch point and were left so that they could be dropped in spur when needed. The grade is heavy at this point. The engine backed down and the cars followed and collided with the same. Three men were riding on the pilot and they were instantly killed. It was dark and the cars could not be seen. It was recommended that a derail be placed west of the switch to safeguard this point.

This recommendation was adopted by the railroad company and derail installed.

New York, Susquehanna and Western Railroad.—Woman struck on crossing—Rochelle Park.

A woman was struck and killed on the crossing of the New York, Susquehanna and Western Railroad, at Rochelle Park.

Investigation showed that there is a good view at this crossing if no cars are left west of the road-crossing on switch leading to McMullen's Coal Pockets. The Board recommended that no cars be allowed to stand in this location.

The railroad company notified the Board that it would comply with this recommendation.

West Shore Railroad.—Switchman killed—Weehawken Passenger Yard.

The track used by the express company in the Weehawken Passenger Yard has a curve of such a nature that in order to haul cars out on a straight line, safety chains are hooked. A railroad employee, not familiar with the work at the place, attempted to couple the chains but was caught between cars as they came together.

It was recommended, after inspection of conditions at this point, that track be thrown nearer the frog to ease the curve so that cars could be coupled the same as on other tracks.

This recommendation was adopted by the railroad company.

Central Railroad of New Jersey.—Crossing accident—Garwood.

A horse, attached to a wagon which had been left standing near the railroad at Garwood, went on the track and was struck and killed. Inspection showed that there is an open space between end of freight platform and gate at this point, and that this space is sufficiently large for a wagon to pass through and onto the tracks while trains are passing. It was recommended that a fence be erected or gate installed so as to prevent this opening.

The railroad company advised the Board that it would move station, construct overhead bridge, inter-track fence and gates.

Central Railroad of New Jersey.—Crossing accident—Communipaw.

A wagon was struck at Jersey avenue, Communipaw, on the Central Railroad, and driver injured. There is considerable highway traffic but few train movements. It was recommended that when trains move over the crossing one of the crew be stationed there with a flag.

The railroad company issued orders for compliance with this recommendation.

Central Railroad of New Jersey.—Crossing accident—Neshanic station.

A wagon was struck at the highway crossing at Neshanic station, on the Flemington Branch of the Central Railroad, killing one horse and injuring another. Investigation developed the fact that the view is at times obstructed by cars left for loading on siding next to main track. The crossing is not protected. Owing to conditions it was recommended that some protection be afforded.

The railroad company issued an order that no cars be left nearer the crossing than 150 feet, and located a sign at the point to that effect.

Erie Railroad.—Crossing accident—Leonía.

A wagon was struck on the crossing at the east end of the Leonia station, the driver sustaining injuries. Forty trains pass over the crossing each weekday, nine of which do not stop at Leonia. It was recommended that an employe of the road protect the crossing while trains are passing over it which do not stop at the station.

This recommendation was sent to the railroad company, which claimed that the view of the crossing is good; that there is an alarm bell at the crossing, and that no person exercising ordinary care would be injured. The company contended that protecting the crossing for trains that do not stop and leaving it unprotected for trains that do stop would be a dangerous practice.

The Board gave due consideration to the argument of the railroad company, but decided that, in view of the speed at which

trains pass over the crossing without stopping at the station, there should be protection for these trains, and the recommendation of the Inspector was formally endorsed by the Board.

Pennsylvania Railroad.—Crossing accident—Mount Laurel road, Masonville.

A bakery wagon drawn by two horses was struck on the Mount Laurel road crossing by an express train. The driver was badly injured, both horses killed and the wagon demolished. The assistant to the agent at Masonville flags express trains at this station. An investigation showed that he was at the crossing, that he saw the wagon approach when it was about 250 feet from the track, and that he called to the driver, who apparently did not hear. At the time of the accident two crossings were at this point, close together, and two cars were standing on the siding track between the two crossings, which obstructed the view for travelers going north. The opinion was expressed that there was no necessity for the existence of the two crossings so close together, and that if one crossing should be eliminated the danger of crossing the railroad tracks would be lessened.

The Board has since been advised that the railroad company made application to the proper authorities for a consolidation of the two crossings, and that the crossings have been consolidated.

Central Railroad of New Jersey.—Crossing accident—Chimney Rock Branch.

A freight train backing cars over Turnpike crossing on the Chimney Rock branch of the Central Railroad, struck a trolley car, demolishing the same and injuring two passengers. An investigation showed that there is a good view of the tracks at the crossing. It was the duty of the conductor of the trolley car to be on the railroad track or east of it before giving the signal for the motorman to cross the railroad tracks. The brakeman stated that he saw the trolley car approaching and gave the signal to stop; that the brakes were applied and the train stopped twenty feet beyond the point of collision.

Orders have been issued by the railroad company that trains or engines going north over the crossing shall come to a full stop before reaching the crossing.

West Jersey and Seashore Railroad.—Crossing accident—Ferry avenue, Camden.

An automobile passing over Ferry Avenue crossing of the West Jersey and Seashore Railroad, Camden, was struck, the driver killed and the automobile demolished. The crossing is protected by a bell operated by a gateman at the first crossing north of Ferry avenue. It was stated that the bell was ringing and the usual signals given. The view of northbound trains, when within seventy-five feet of the tracks, in the direction from which the automobile approached, extends for about a mile, but is partially obstructed by underbrush and trees. At the time of inspection four cars were on the siding, close to the crossing, and it was noticed that the fourth car obstructed the view of southbound trains. It was recommended that the cars should not be allowed to stand so close to the crossing as to interfere with a fair view, and that brush should be cut down.

Orders have been issued by the company embodying this recommendation.

Erie Railroad.—Crossing accident—Hawthorn.

A man driving easterly at 6:35 A. M., was struck at the crossing at the west end of Hawthorn station, on the Erie Railroad, and seriously injured. A flagman was stationed at the crossing from 7 A. M. until 7 P. M. The abutments of the bridge obstruct the view at the crossing and it was recommended that the crossing be protected by a flagman both day and night.

The railroad company agreed to maintain a flagman at the crossing from six o'clock in the morning until 12 o'clock at night, and as the records showed scarcely any travel in the remaining six hours the Board agreed to the railroad company's proposition.

West Jersey and Seashore Railroad, Electric Line.—Crossing accident—Mays Landing.

A man riding a motor cycle over the County Road crossing of the West Jersey and Seashore Railroad, electric line, north of Mays Landing, ran against one of the cars of a passing train and was killed. From the direction which the man was approaching there is a fair view of the tracks. Apparently he was not looking

for a train as he ran into the second car. It was recommended that in order to improve the view at this crossing the brush should be trimmed on both sides of the track.

This was done.

Erie Railroad.—Caboose dropped between rails—Garfield.

While a train, consisting of an engine and seven cars, was backing out of the New Jersey Spinning Company's switch at Garfield and traveling around the curve, the caboose dropped inside of rails. This was caused by the track gauge being too wide. The fireman was running the engine, and the engineer, who was in the caboose, in trying to get out fell and was fatally injured. It was recommended that the track on curve be double spiked and rail braces used.

This has been done.

Pennsylvania Railroad.—Crossing accident—Park avenue, Merchantville.

A man driving over Park Avenue crossing, Merchantville, on the Amboy Division of the Pennsylvania Railroad, was struck and sustained slight injuries. The accident occurred at 7:35 P. M. The horse was killed and the wagon demolished. There was a gateman stationed at the crossing, but he was not on duty in the evening. It was recommended that this crossing should be protected to cover all trains.

In compliance with the above the hours of duty of the watchman have been extended. Warning bell will be placed at the crossing.

Central Railroad of New Jersey.—Crossing accident—Asbury Park Road.

A wagon driven by a man, over the Asbury Park Road crossing between Shark river and Farmingdale, on the Central Railroad of New Jersey was struck, the driver fatally injured, the horse killed and the wagon demolished. Travel over the crossing is not heavy. The view from the easterly side is obstructed owing to embankment and brush. It was recommended that in

order to afford all view possible the brush be cleared on the east-
erly side of the crossing.

This has been done.

Central Railroad of New Jersey, West Jersey and Seashore Railroad.—Steam grade crossing—Bridgeton Junction.

A freight train of the Central Railroad was struck while standing on the crossing at Bridgeton Junction, by a train of the West Jersey and Seashore Railroad. The engineer and head brakeman of the West Jersey and Seashore Railroad train were killed and the fireman seriously injured. It was claimed by the conductor of the Central Railroad train that before occupying the crossing the signal was placed at danger and was against the West Jersey and Seashore train at the time of the collision. The following recommendations were made with respect to this crossing: "That derails interlocked with home signals be installed five hundred feet from crossing. If no derails all trains must come to a stop at the home signal governing their movement, before passing over the crossing. Under conditions as they existed at the time of the accident signals must be left at danger at all times except when permission is given to proceed. All trains to come to a stop before passing the signal governing their movements."

West Jersey and Seashore Railroad.—Crossing accident—Pitman avenue, Penn's Grove.

A team of horses, standing at loading platform at Penn's Grove, became frightened at an automobile and ran on track in front of a passenger train. The wagon was struck, a horse was killed, and the driver injured. Speed of trains is limited to five miles per hour over two crossings south of Pitman avenue. It was recommended that the speed limit regulation of five miles per hour be extended to cover Pitman avenue crossing.

This was done.

West Jersey and Seashore Railroad.—Crossing accident—Williamstown road, Iona.

A train passing over the Williamstown road, crossing at Iona station, on the West Jersey and Seashore Railroad, struck a wagon, fatally injuring the driver and killing the horse. The

crossing is not protected, and as the tracks are approached from the easterly side the station building and platform obstruct the view of northbound trains until within ten feet of the track. It was recommended that protection be afforded at this crossing.

Warning bells have been placed at this crossing.

West Jersey and Seashore Railroad Electric Line.—Crossing accident—Landis avenue, Vineland.

As southbound electric train was passing over Landis avenue crossing, Vineland, at 9:50 P. M., it struck a wagon. The wagon was slightly damaged; no one was injured. The crossing is protected with gates from 6:30 A. M. to 7 P. M. There is a siding at this crossing for loading and unloading cars, and it was recommended that after 7 P. M. cars be placed away from the crossing to allow a better view of the tracks.

Orders have been issued by the company embodying this recommendation.

Atlantic City Railroad.—Crossing accident—Lawnside.

A man driving over first crossing south of Lawnside station on the Atlantic City Railroad was struck and killed. Horse was killed and wagon demolished. Tracks are curved south of the crossing. The crossing is not protected. There is considerable travel on the highway, and a large number of trains passing over the crossing, among them express trains at high speed. It was recommended that the crossing be protected.

A warning bell has been placed at this crossing.

West Jersey and Seashore Railroad.—Crossing accident—South Woodbury.

Train passing over the Glassboro road crossing, at South Woodbury, struck a covered wagon, injuring the three occupants. The wagon was approaching from the north, and the train was going west. There are two tracks at this crossing, one for the Salem branch, and the other for the Penn's Grove branch of the West Jersey and Seashore Railroad. Just east of Glassboro avenue the two branch tracks join the main line tracks. Anyone approaching the tracks on Glassboro avenue and seeing a train leaving the main line might be confused as to which track the

train would take, especially at night. This happened with respect to the driver in this instance, as he observed the train and then started to cross, thinking the train would stop. The engineer saw the wagon, but expected it would wait for the train. The crossing is not protected, and it was recommended that protection be afforded.

A flagman has been placed at this crossing.

New York and Long Branch Railroad.—Crossing accident—
Monmouth avenue, Spring Lake.

A Pennsylvania Railroad train, southbound, on the New York and Long Branch Railroad struck, at Monmouth avenue, Spring Lake, a stage containing twelve people. The driver was killed, some of the occupants were slightly injured, and the stage demolished. There is no protection at the crossing. The view of southbound trains, owing to trees on the northwest corner, is obstructed until a point is reached thirty feet from the southbound track. It was recommended that trees be cut down to afford a better view of southbound track.

The Board has been advised that these trees have been cut down.

West Jersey and Seashore Railroad.—Crossing accident—Holly avenue, Pitman.

Northbound electric train on the West Jersey and Seashore Railroad struck and killed a man at Holly avenue crossing. The crossing is protected with bells and watchman. Watchman called to the man who was killed and waved to keep him back, but, instead of waiting, he attempted to cross.

Board was advised that gates would be placed at this crossing.

West Jersey and Seashore Railroad.—Crossing accident—Paul street, Gloucester.

Northbound passenger train on the Salem branch of the West Jersey and Seashore Railroad struck and killed a boy at Paul street crossing, in the city of Gloucester. The boy was walking over the crossing, and when he reached the middle of the track stopped as a freight train was passing on the southbound track at the same time passenger train, northbound, was approaching.

Engineer, seeing the boy standing on the crossing, blew the whistle and applied brakes. The boy made no effort to move. It is evident that the noise of the passing freight train prevented him from hearing the whistle of the passenger train. The crossing is protected by bell, operated between the hours of 7 A. M. and 7 P. M., and by flagman at Monmouth street. This watchman is also required to operate crossing bell at Cumberland street, the first crossing south of Monmouth street. Gloucester station is located at the crossing, and passengers cross the track continually after departure of trains, and the flagman also tries to protect these passengers.

It was recommended that crossing bells at Cumberland street and Paul street be operated automatically, and that an inter-track fence be erected at Gloucester station, so that the flagman's duty might be confined solely to protecting Monmouth street crossing.

West Jersey and Seashore Railroad.—Crossing accident—Cape May Court House.

Express train on the West Jersey and Seashore Railroad struck a light wagon at Hand avenue, Cape May Court House, fatally injuring the driver, killing the horse and demolishing the wagon. The crossing is not protected. Approaching the crossing from the west, the view of southbound trains is obstructed by cars on spur track. The question of cars obstructing the view was taken up with the company, and orders were issued to have the spur track taken up and located at a point back of the station building so that this obstruction would no longer exist.

Central Railroad of New Jersey.—Crossing accident—Pavilion and Second avenues, Long Branch.

A stage was struck at Pavilion and Second avenues, Long Branch, on the Central Railroad, injuring the driver and demolishing the stage. Inspection showed the crossing to be protected by gates located on Second avenue at two points, the Pavilion avenue approaches being also protected by gates. Second avenue crosses diagonally, and Pavilion avenue at right

angles. The gates are operated from a tower in the center of the crossing, operator on duty from 6:40 A. M. to 10:30 P. M. The last passenger train passes over the crossing at 11:28 P. M. It was recommended that the protection be extended to cover the time of the crossing of the last train at night.

The railroad company agreed to comply with this recommendation.

New York, Susquehanna and Western Railroad.—Crossing accident—Main street, Hackensack.

An automobile was struck at Main street, Hackensack. No one injured. The crossing is protected with gates, which were not put down in time. It was recommended that signals be kept at danger at all times except when gates are closed to traffic.

The railroad company agreed to comply with this recommendation.

Erie Railroad.—Crossing accident—Newark Branch.

A wagon was struck on a crossing located five hundred feet east of Riverside station. The driver was seriously injured. There is a large sign at the crossing reading: "This is private property and not a public road or way. No thoroughfare. Look out for the locomotives. There is especial danger in the use of this railroad crossing. Every person is warned not to use same. Anyone using same does so at his own risk and peril. By order of General Superintendent of Works. March 10th, 1906." The opinion was expressed by the Inspector that, as the view is obstructed and there is a descending grade, making it difficult to stop before reaching the track, some protection should be given to the crossing.

The matter has been taken up with the Board of Works of the City of Newark.

Delaware, Lackawanna and Western Railroad.—Boy injured—Chester Junction.

A boy was struck and injured by one of the side boards used on a flat-car for hauling dirt. It was recommended that some-

one connected with the train should see that the side boards are in place to prevent injury to persons or the striking of passing trains.

The railroad company notified the Board that this would be done.

Lehigh & Hudson River Railroad and New York, Susquehanna & Western Railroad.—Grade-crossing collision—Franklin Junction.

A collision occurred at Franklin Junction, between trains of the New York, Susquehanna & Western Railroad and Lehigh & Hudson River Railroad. This was caused by operator giving clear signal to an opposing train when another train was standing at the crossing. It was recommended that instructions should be given to operators in towers, at places similar to this, to the following effect: "After a train is given signal to proceed, this signal must not be changed until the train using the crossing has cleared same."

The crossing where the accident occurred is protected by interlocking signals; no derails; all trains come to a stop before crossing.

The recommendation made was adopted by the railroad company.

Erie Railroad.—Crossing accident—Somerset avenue, Garfield.

An accident occurred at Somerset avenue, Garfield, resulting in two horses being killed. The view at this crossing was found to be badly obstructed for eastbound trains, and travel increasing. Bell is located twelve hundred feet from the crossing. It was recommended that further protection be afforded.

When the attention of the company was called to the Inspector's recommendation, it made reply to the effect that two hundred feet east of the point where the accident occurred there is an underground crossing, the use of which would eliminate accidents of this character. It was stated that Somerset avenue is protected by a crossing bell, and opinion was expressed that this protection is adequate. Due consideration was given by the Board to the company's statement, but it was decided, that in

view of the accident which happened at the crossing, and the conditions there existing, as disclosed by inspection, additional protection was advisable, and this was formally recommended by the Board.

Central Railroad of New Jersey.—Crossing accident—Boynton Beach.

While drilling cars over highway into lumber yard at Boynton Beach, on the Central Railroad, end car struck a wagon containing several men, two of whom were slightly injured. Investigation showed that movements are infrequent over the track, but views from the highway are obstructed, and it was recommended that whenever engine or car movements are made over the highway the crossing be protected by one of the train crew.

This recommendation was adopted by the railroad company.

Lehigh Valley Railroad.—Crossing accident—Irvington.

Drill train in the freight yard of the Lehigh Valley Railroad, at Irvington, struck a wagon and injured the driver. As views of this crossing from the highway are obstructed, it was recommended that no engine or car movements should be made in a southerly direction over the crossing on main track without its being protected by an employee with flag to warn travelers on the highway.

This recommendation was adopted by the railroad company.

West Jersey and Seashore Railroad.—Crossing accident—10th street, Ocean City.

Train passing over 10th street crossing, Ocean city, struck a wagon demolishing same, killing horse and slightly injuring the driver. It was recommended that warning sign be placed on the crossing.

The railroad company agreed to comply with this recommendation.

New York and Long Branch Railroad.—Crossing accident—12th avenue, Belmar.

A train, northbound, on the Central Railroad, passing over 12th avenue, Belmar, struck a covered wagon, demolishing same,

and fatally injuring the driver. Inspection showed that cars standing close to the crossing obstruct the view. During the summer schedule, the crossing is protected by a flagman the remainder of the year there is no protection. It was recommended that cars on sidings one and two should not be placed to stand nearer the northerly and southerly line of the highway at the crossing than seventy-five feet, and cars on private siding, twenty-five feet from highway line.

The railroad company agreed to comply with this recommendation.

Causes of Accidents.

The causes of the accidents which occurred from December 1st, 1908, to November 30th, 1909, were as follows:

	<i>Killed.</i>	<i>Injured.</i>
<i>Collisions—</i>		
Passengers,	69
Employees,	13	25
Others,	4
<i>Crossing Track at Highway—</i>		
Others,	29	60
<i>Derailments—</i>		
Passengers,	3
Employees,	4	6
<i>At Bridges and Tunnels—</i>		
Employees,	3	8
Others,	1	1
<i>Struck by Locomotives or Cars—</i>		
Passengers,	3	6
Employees,	58	50
Others,	12	6
<i>Getting On or Off Trains—</i>		
Passengers,	11	39
Employees,	7	31
<i>Coupling or Uncoupling Cars—</i>		
Employees,	2	26
<i>Other Causes—</i>		
Passengers,	1	5
Employees,	11	48
Others,	7	3
<i>Trespassing on right-of-way,</i>	<u>149</u>	<u>119</u>
	311	509

The totals for the corresponding period of the year 1908 were 360 killed and 511 injured. The total number of those who sustained injuries is but two less than in 1908, but the number of those killed is considerably less, and this notwithstanding the fact that 17 employees were killed last year as the result of collisions and derailments as compared with 3 employees killed by similar causes in 1908. The number of fatalities from other causes is less. While 41 persons were killed crossing railroad tracks at highways in the year 1908, but 29 were killed in the year 1909. 33 employees were killed in 1908 as the result of a number of miscellaneous accidents. In 1909 but 11 employees, or 22 less than in 1908, were killed as a result of these miscellaneous accidents. The number of trespassers killed, while large, is less than in 1908, numbering 149 in the year 1909 as compared with 167 for the preceding year.

APPENDIX.

Memorandum Relating to Protection at Grade Crossings and Suggestions as to Proceedings under Laws of 1909, Chap. 189, Sec. 2.

The increasing number of complaints filed by governing bodies of municipalities under section 2 of Chapter 189 of the Laws of 1909, which act is a supplement to that creating this Board, seems to make expedient, at this time, a brief reference to the legislation and some of the adjudications relating to the protection of grade crossings and to the powers vested in this Board.

SPECIFIC PROTECTION REQUIRED BY STATUTE.

Section 35 of "An act concerning railroads (Revision of 1903)," Chapter 257, P. L. 1903, which embodies the provisions of two statutes enacted in 1839 and 1852 (1 Nix. Dig. p. 680), respectively, imposes upon all railroad companies operating within the State certain duties in the giving of warning of the approach of an engine to "a grade crossing of a highway."

This section, which still remains in force, is as follows: "A bell of a weight not less than thirty pounds shall be placed on each engine and rung continually in approaching a grade crossing of a highway, beginning at a distance of at least three hundred yards from the crossing and continuing until the engine has crossed such highway, or a steam whistle shall be attached to each engine and be sounded, except in cities, at least three hundred yards from the crossing and at intervals until the engine shall have crossed the highway, under penalty of twenty dollars for every default, to be paid by the company operating such road, to be sued for by any informer within ten days after such penalty was incurred, one-half thereof to go to the former and one-half to the county; *provided*, that nothing herein shall take away any

remedy for such neglect from any person injured thereby; every railroad company shall cause a conspicuous sign, with the inscription on each side: 'Look out for the locomotive,' to be maintained at each highway crossing at grade of its railroad, so as to be easily seen by travelers, but such signs need not be maintained in any city, town, borough or village unless required by the municipal authorities."

The limitations upon the duties imposed by this section should be noticed.

Where a warning whistle is employed the section does not require sounding thereof within the limits of a "city."

The duty to maintain warning signs exists in cities, towns, boroughs or villages, only where the erection of such signs is required by the municipal authorities.

In connection with this section attention is directed to the eighth section of the act creating this Board providing that: "It shall be the duty of said Board to see that the laws of this State regulating said railroad companies are observed and enforced, and it may cause action to be brought against any railroad company violating any of the laws of this State for the specified penalty."

PROVISION IN MUNICIPAL CHARTERS.

While no general statute seems clearly to confer upon the municipalities power to require the protection of highway crossings, the charters under which some of the municipalities exist confer such power upon them.

The charter of the township of East Orange (P. L. 1873, Sec. 4), for instance, conferred upon it power to pass, alter and repeal ordinances "to compel any railroad company to station and maintain flagmen wherever such railroad may cross any streets or highways in said township and to maintain a fence and gates wherever such railroad may cross Main street in said township."

Under this provision of the charter an ordinance was adopted requiring the stationing of flagmen at various crossings. This ordinance and the statute under which it was adopted was attacked but sustained by our Supreme Court in *Delaware, Lacka-*

wanna and Western Railroad Company vs. East Orange, 41 N. J. L. 127.

In further illustration, the charter of the city of Bridgeton (P. L. 1875, p. 354) authorized the council thereof, by ordinance, "to regulate the speed and running of locomotive engines and railroad cars through said city and to designate the crossings at which any railroad company shall be required by the city council to station flagmen or signals to warn travelers of the approach of locomotive engines or railroad cars." Under this authority the city council adopted an ordinance requiring two railroad companies "to erect, maintain and operate safety gates at the railroad crossing on Irving avenue, in the city."

The Supreme Court in *West Jersey, etc., R. R. Co. vs. Bridgeton*, 64 N. J. L. 189, adjudged this ordinance *ultra vires* and set it aside.

Construing the provisions of the charter, Justice Dixon, in the course of the court's opinion (190) said: "The power to 'regulate the speed and running of locomotive engines and railroad cars' is most reasonably interpreted by confining its scope to the regulation of the rate at which the engines and cars may be propelled and the times when and places where they may stand in obstruction of ordinary public travel. (*Penn. R. R. Co. vs. Jersey City*, 47 N. J. L. 286.)

"The power to 'designate the crossings at which any railroad company shall be required to station flagmen or signals to warn travelers of the approach of locomotive engines or railroad cars,' fails to constitute a clear grant of the necessary power because its terms are limited to 'warning signals,' while 'safety gates' are something more than 'warning signals.' They are physical hindrances in the way of those seeking to cross the railroad tracks. They substantially differ in both their nature and their office, from mere signals. The proper rule of interpretation forbids such an extension of the grant as would include these appliances."

See, also, *M. and E. R. R. Co. vs. Orange*, 63 N. J. L. 252, 258.

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POWER CONFERRED UPON MUNICIPALITY MUST BE EXERCISED IN REASONABLE MANNER.

The case of *Delaware, Lackawanna and Western Railroad Co. vs. East Orange*, just referred to, and that of *Central Railroad Co. vs. Elizabeth*, 70 N. J. L. 578, establish that municipalities in whom such delegated powers are vested must exercise their authority "in a reasonable manner."

P. L. 1898, P. 110, AND SEC. 36, OF THE GENERAL RAILROAD ACT.

In 1898 (P. L. 1898, p. 110) the Legislature enacted the statute which now constitutes section 36, of "An act concerning railroads (Revision of 1903)," P. L. 1903, Chap. 257, and which provides: "Whenever the governing body of any township or municipality shall, by ordinance, so direct, an application shall be made on behalf of said township or municipality to the Court of Chancery, by petition, for an order that gates shall be erected across any one or more streets or highways where the same are crossed by a railroad track at grade, or that a flagman shall be stationed there to give notice of the approach of trains, or that some other reasonable provision for protecting such crossing shall be adopted; and upon filing such petition, the Chancellor shall, after such notice to the railroad company operating said railroad as he may deem necessary, proceed in a summary way, in person or by reference to a vice-chancellor or master, to investigate the circumstances of the case, and, if the court shall decide that protection of the crossing is reasonable and necessary, the court shall make an order or decree that gates or bars shall be erected and maintained or a flagman stationed, by such railroad company, at such crossings or any of them, or that some reasonable provision for protecting the crossing to be specified on said order or decree shall be made by said railroad company; the railroad company shall protect the crossing as so directed, and may be compelled so to do by mandatory injunction and other appropriate remedy, and such order or decree shall be subject to review on appeal; in the case of high-

ways hereafter laid out crossing at grade railroads constructed at the time of opening of such crossing, the court shall, on such application, determine what portion, if any, of the expense of establishing gates and maintaining the same, or of maintaining flagmen, should be borne by the township or municipality, and may make such order for the payment as may be necessary; *nothing in this section shall repeal or limit the other powers conferred upon any township or municipality to protect or regulate grade-crossings.*"

This statute was attacked and sustained in *Palmyra v. Penn. R. R. Co.*, 62 N. J. Eq. 601; same case on appeal, 63 N. J. Eq. 798.

THE STATE OPERATES UPON THE SITUATION AS IT EXISTS AT
THE TIME OF FILING PETITION.

In *Eckert v. Perth Amboy and Woodbridge R. R. Co.*, 66 N. J. Eq. 437, a final decree made by our Court of Chancery under this statute was brought under review in the Court of Errors and Appeals.

The appeal from the decree was based, among other matters, upon the grounds that to justify an order of the nature made in the case requiring the erection and maintenance of gates or bars which might be raised or lowered as occasion might demand, it must not only appear that the crossing is a dangerous one, but that the danger is a consequence of some action of the railroad company, and not the result of other causes, such as the growth of the population, or the erection of obstructions adjacent to the railroad track by others than the railroad company.

Referring to this ground of objection, the court, by Justice Fort, said (438): "The statute, as we construe it, operates upon the situation as it exists at the time of the filing of the petition under the act. *If then, from any cause*, a condition exists which makes it reasonable and necessary for the security of human life, or the protection of the public, that the safeguards authorized by the statute be decreed to be erected and maintained, the court may so order."

CERTAIN PROVISIONS IN THE CHARTERS OF RAILROAD COMPANIES NO BAR TO SUCH LEGISLATION.

In *Palmyra v. Penn. R. R. Co.*, *supra*, the defendant company claimed, by virtue of a charter provision, a right to cross highways along its route at grade at a high rate of speed, upon constructing passages across its railroad, "so that the passage of carriages, horses and cattle shall not be prevented thereby" (P. L. 1830, p. 88, sec. 15), and insisted that these provisions of the original railroad charter had been observed and that they gave some contractual rights to the railroad company which had been intruded upon by the statute.

This claim and insistment were denied by Vice-Chancellor Grey, who, in the course of his opinion, said (609): "If it be true that the original charter gives to the Camden and Amboy Railroad Company and its successors the right to construct a railway across public highways, and imposes only a duty to build passages across the railroad for horses and carriages, which, once performed, need not be changed, then not only the act of 1898, but the statutory provision requiring a bell, must also be held to be unconstitutional impairments of the original contract, for both those requirements were imposed by subsequent enactments." * * *

"The effect of this requirement to build passages across public highways has been declared by our courts. The same provision, word for word, as that contained in section 15, of the Camden and Amboy Railroad charter occurs in the charter of the Central Railroad of New Jersey (P. L. of 1847, p. 133). This section was construed by the Supreme Court, in the case of *Central Railroad Co. v. State*, 2 *Vr.* 224, and the construction given entirely refutes the idea that a 'once for all' construction of such railroad crossings is a compliance with the charter requirements. It was there held that the obligation to provide that horses and carriages might have safe passage across the railroad, was 'a continuing duty to which the company is made subject, which in its performance must be measured by circumstances. Thus a bridge or passageway, which at one time would be adequate to the public accommodation, might at the subsequent period,

from an increase of business or population, be totally inadequate, and consequently a provision which at one juncture would be a discharge of the duty, would at another almost amount to an infraction.' The court also recognized the measure of the railroad's business and the consequent danger to the public, rendering the street impassable, as imposing on the railroad company an obligation to provide additional conveniences for safe crossing, and summed up the definition of the company's duty by the declaration: "The duty prescribed is to keep at all times and under all circumstances the public highways, at the point where they cross the railroad, in a condition fit for safe and convenient use.' * * *

"It seems to be quite clear that under the section in question, the duty of the railroad company to provide safe and efficient crossings for the public passage is a continuing one, varying at each crossing as circumstances at that place may vary. Either growth of population and business in the neighborhood of a crossing, or the passage of large railroad traffic over its tracks where the highway crosses it, is a circumstance which will oblige the railroad company to provide additional safeguards. The defendant company cannot under the provisions in the Camden and Amboy Railroad Company charter, requiring it to provide passage across its tracks, maintain that such crossings were arranged once and for all, thus relieving that company from all further duty in the matter."

PROCEEDINGS UNDER THE STATUTE CANNOT BE INITIATED BY
AN INDIVIDUAL; MUNICIPAL ACTION REQUIRED.

The proceeding authorized by this act is wholly statutory. The application thereunder can only be made by the governing body of a municipality, and before such governing body can make application it is requisite that it adopt an ordinance directing such application to be made.

See *Eckert vs. Perth Amboy and Woodbridge Railroad Co.*, *supra*, 488.

THE RAILROAD BOARD ACT.

The statute hereinbefore referred to, enacted in 1907, and under which this Board was created, by section eight thereof made it the duty of the Board to "hear and examine complaints touching * * * crossings." It gave the Board no power to make any order as the result of such hearing and examination, but confined it to the making of such recommendations to any railroad company as it might from time to time see fit.

SECTION 2 OF THE SUPPLEMENT OF 1909 TO THE RAILROAD BOARD ACT.

By section 2 of a supplement to this statute enacted in 1909, P. L. 1909, Chapter 189, it was provided that: "Whenever a complaint is lodged with the Board of Railroad Commissioners by the board of chosen freeholders of any county, the governing body of any township or municipality, or by twenty or more freeholders and taxpayers of any township or municipality to the effect that a public highway and a railroad cross one another in such county, township or municipality at the same level, and that the conditions at said grade crossing are such as to make it necessary for the protection of travel over the same that gates shall be erected at such crossing, or that a flagman shall be stationed there to give notice of the approach of an engine or train, or that some other reasonable provision for protecting such crossing shall be adopted, it shall be the duty of the Board of Railroad Commissioners to give notice to the railroad company in interest of the filing of such complaint, and to furnish a copy of the same to the railroad company, and to order, if requested by the complainants or any railroad company at interest, a hearing thereon. If, upon such hearing, it shall appear to the satisfaction of the Board that conditions at said crossings are such as to make it necessary for the protection of travel over the same, said board may order and direct the railroad company to erect gates at said crossing and place an agent in charge to open and close the same when an engine or train passes, or that a flagman shall be stationed at such crossing, who shall display

a flag when an engine or train is about to pass, or that such crossing shall be provided with some other reasonable protection as the board determines the better security of human life and the public safety requires."

The adjudications hereinbefore referred to construing P. L. 1898, p. 110, and Section 36 of the General Railroad Act are applicable in the construction of this section.

This section of the statute does not deprive this Board of the powers of recommendation upon its own motion on the initiation of individuals, which was conferred upon it by Section 8 of the statute under which it was established.

The power to order, which this statute confers upon the Board, can be called into operation however only on the complaint of a board of chosen freeholders, the governing body of a township or municipality, or twenty or more freeholders and taxpayers of a township or other municipality.

THE POWER TO ORDER EFFECTIVE.

The power to order conferred by this section is rendered effective by section eight of the act creating the Board, which provides for the service of a copy of the order made upon the railroad company to be affected thereby within five days after the same is decided upon by a majority of the members of the Board, and gives it effect upon the expiration of thirty days after such service, and enacts that: "In default of compliance with said order, when the same shall become operative, said railroad company shall be subject to a penalty not exceeding one hundred dollars per day for violation thereof, to be recovered in an action of debt at the suit of the Board."

BOARD MUST USE JUDICIAL DISCRETION.

The Board, in exercising the power to order conferred upon it by this section, is required to act with judicial discretion and must employ its authority "in a reasonable manner."

See *D. L. & W. R. R. Co., vs. East Orange, supra*, and *Central R. R. Co. vs. Elizabeth*, 70 N. J. L. 578.

SUGGESTIONS AS TO FORM OF COMPLAINTS UNDER THIS SECTION.

The following directions should be substantially complied with in filing complaints under this section:

1. Where a complaint is filed by a board of chosen freeholders or the governing body of a municipality, it should set forth the resolution or other action directing the complaint to be made.

2. Where filed by freeholders and taxpayers, it should be subscribed by the complainants with their names and postoffice addresses, and should recite that each of the subscribers is a freeholder and taxpayer of the township or municipality in which the crossing complained of is located. It should also designate some person to whom communications may be addressed by the Board.

3. In so far as possible each petition should have annexed thereto a sketch of the crossing concerning which complaint is made. It should give the name of the railway company or companies whose trains pass over such crossing, the population of the municipalities through which the highway crossing the railroad runs, contain a census, covering at least two days, of the number of passenger and freight trains daily passing over each crossing, and the number of pedestrians and vehicles daily employing the same; contain a description of obstructions to a clear view at the crossing and set out the distance that the nearest passenger station is located from such crossing.

4. Triplicate copies of each complaint should be filed.

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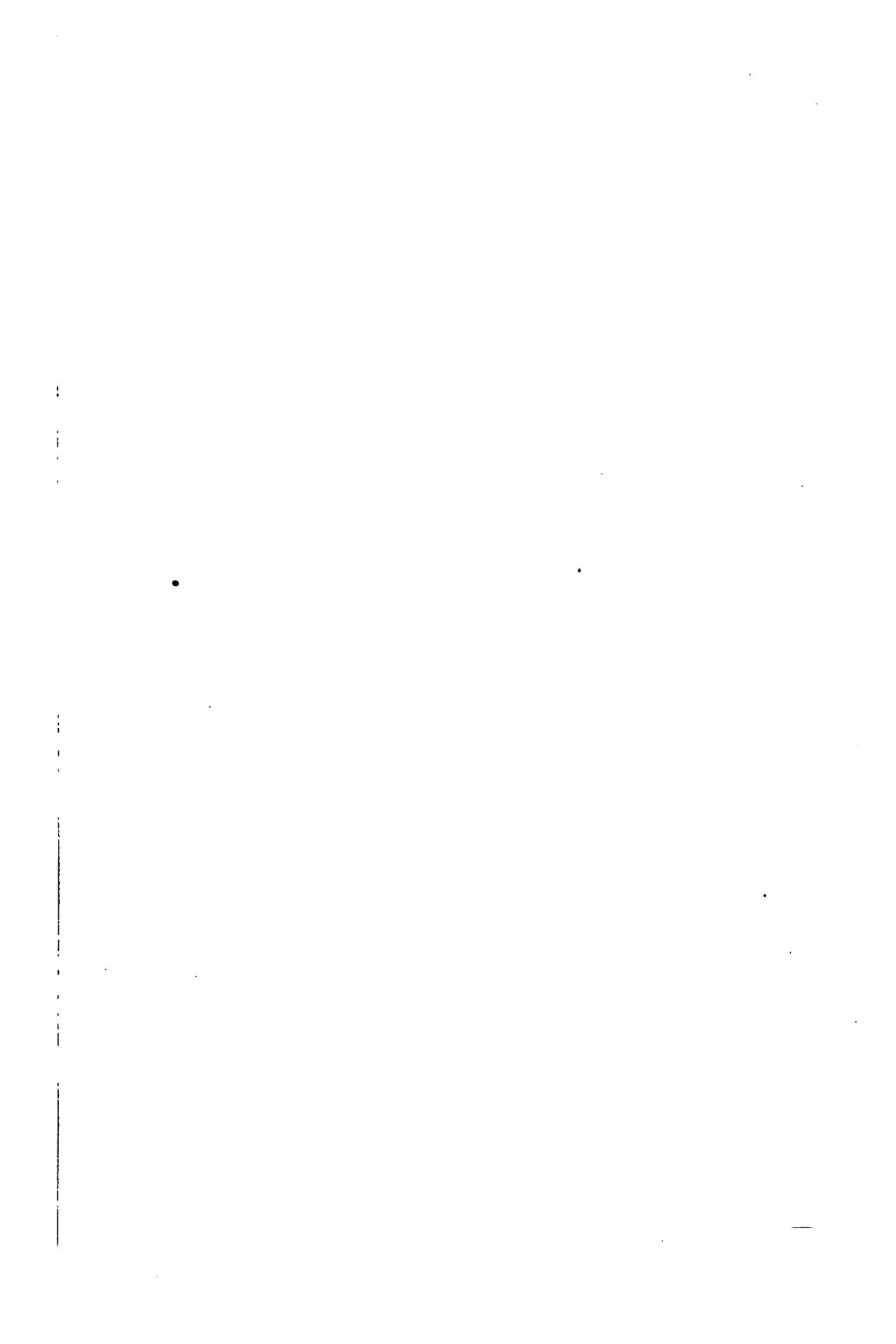
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